FIG. 1

EXAMPLE OF A CONFIGURATION OF DIFFERENTIAL CDMA TRANSMITTER
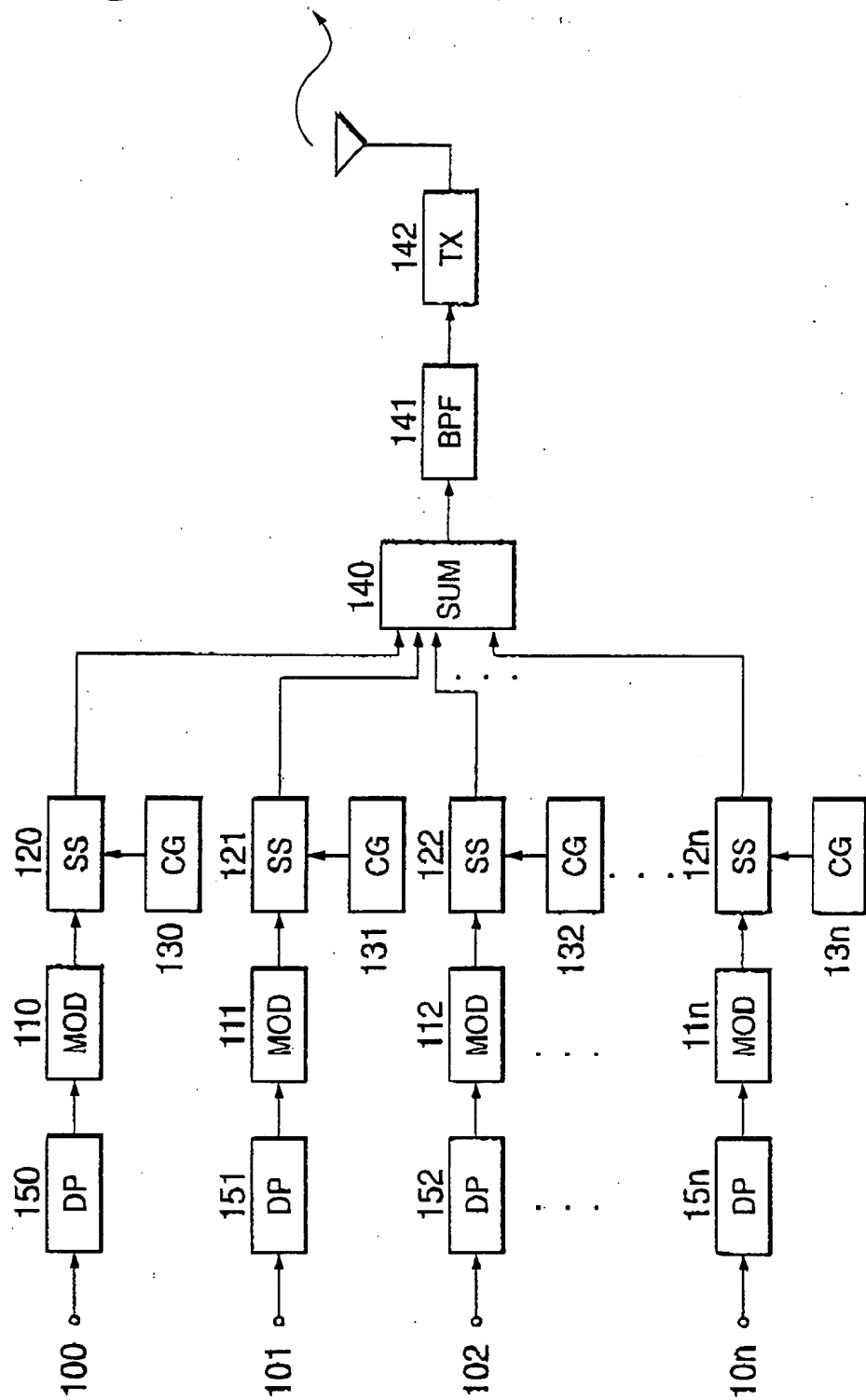
FIG. 2

EXAMPLE OF A DETAILED CONFIGURATION OF
DIFFERENTIAL CODING CIRCUIT (DP)
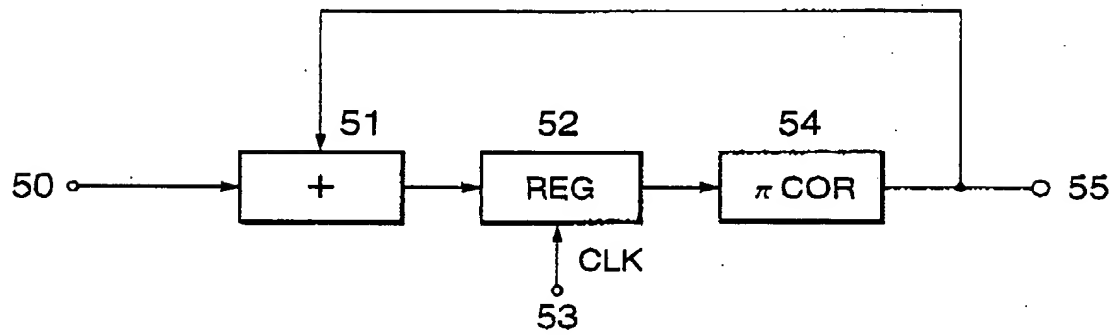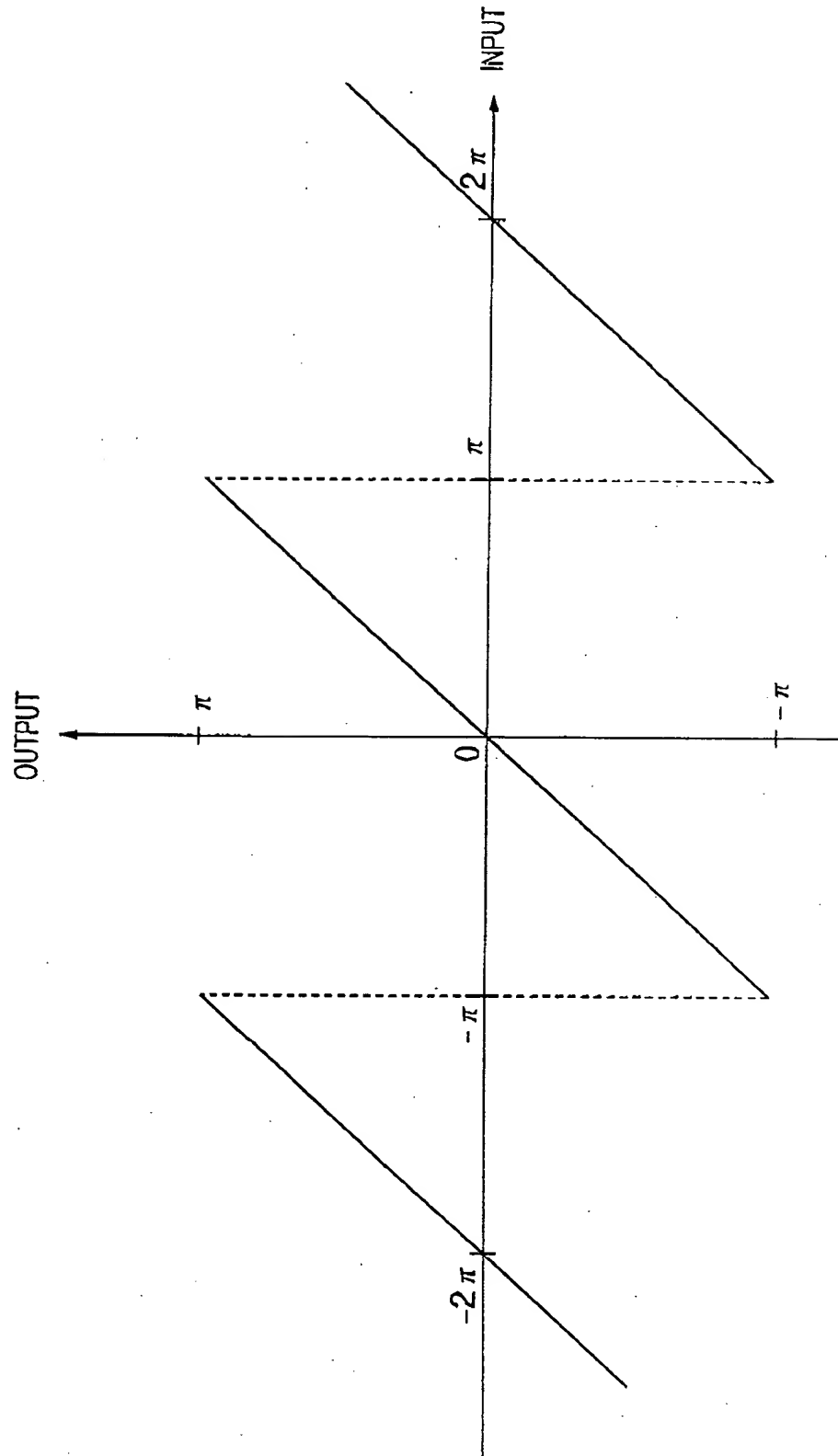
FIG.3

INPUT/OUTPUT CHARACTERISTICS OF π CORRECTOR (π COR)

FIG.4

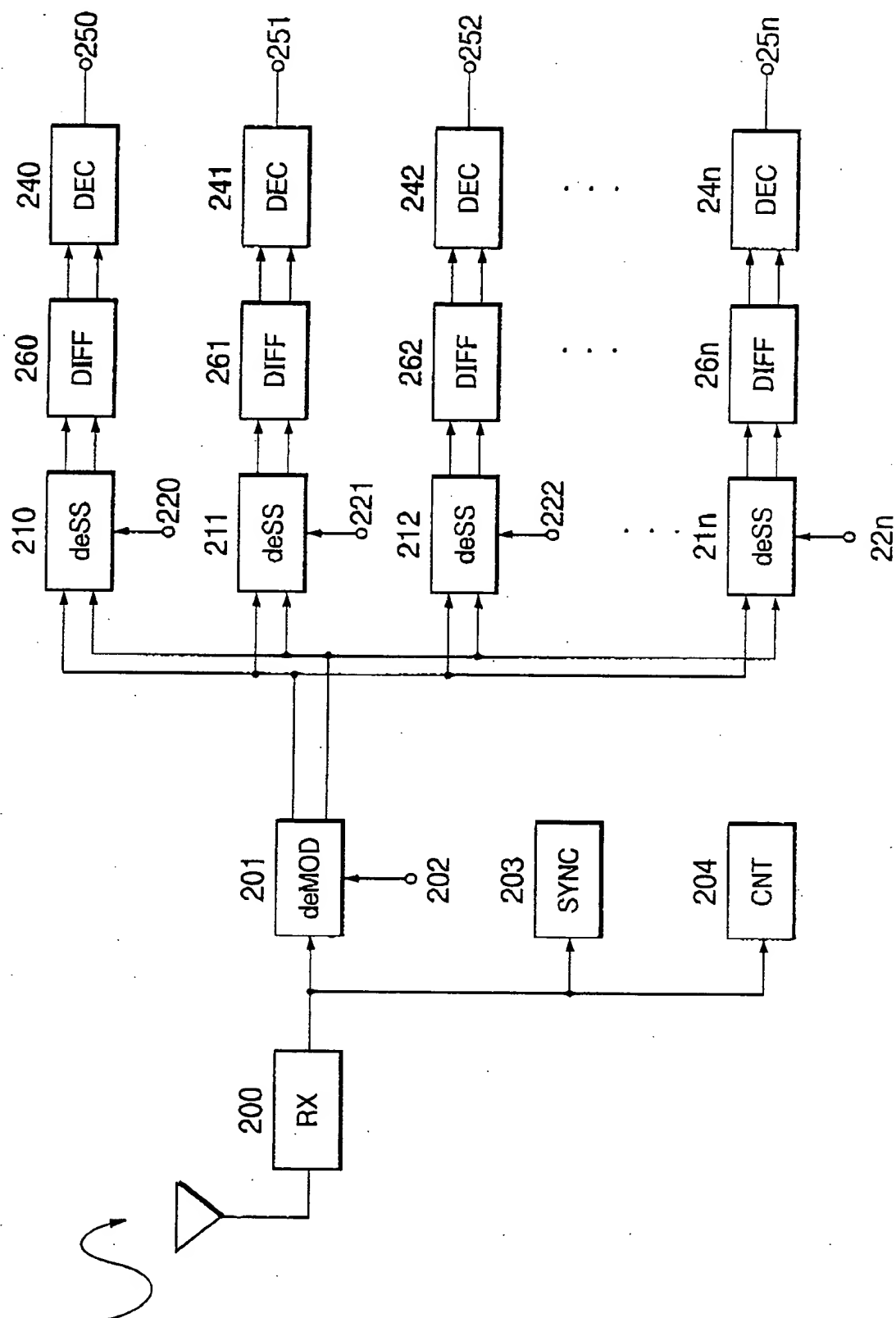EXAMPLE OF A CONFIGURATION OF DIFFERENTIAL CDMA RECEIVER

FIG.5

EXAMPLE OF A DETAILED CONFIGURATION OF DIFFERENTIAL CIRCUIT (DIFF)
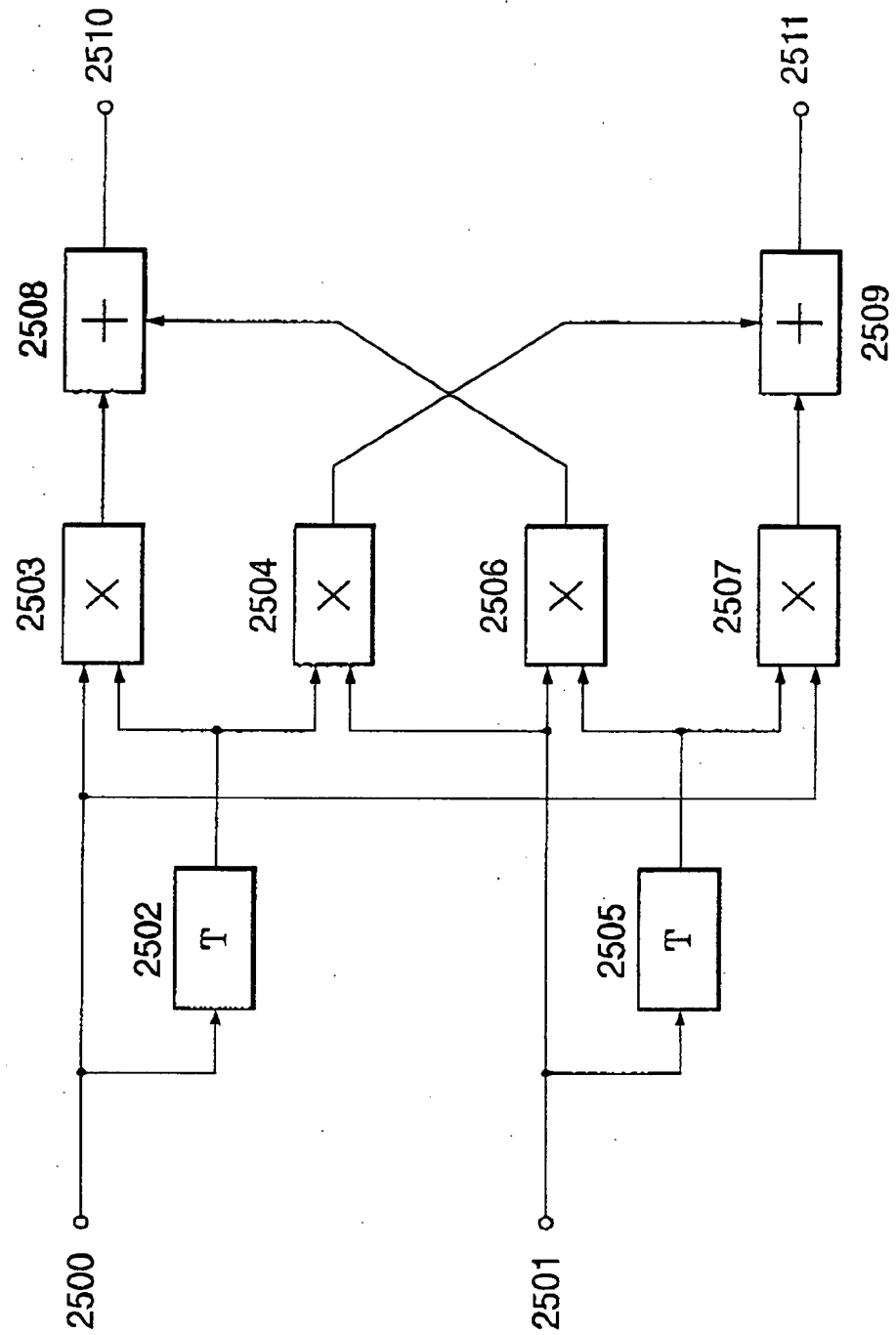
FIG.6

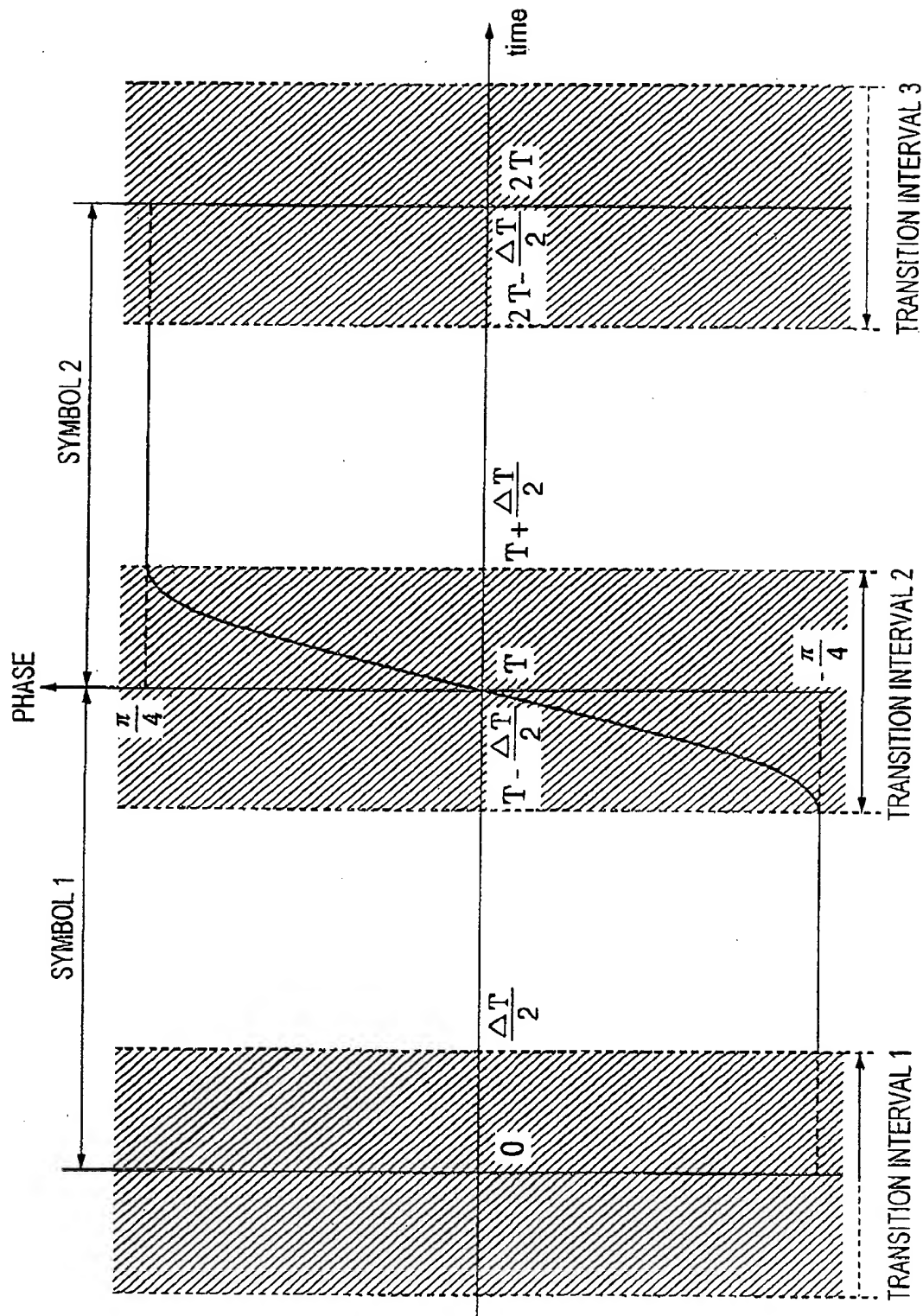SCHEMATIC VIEW OF INFORMATION PHASE

FIG.7

EXAMPLE OF A DETAILED CONFIGURATION OF
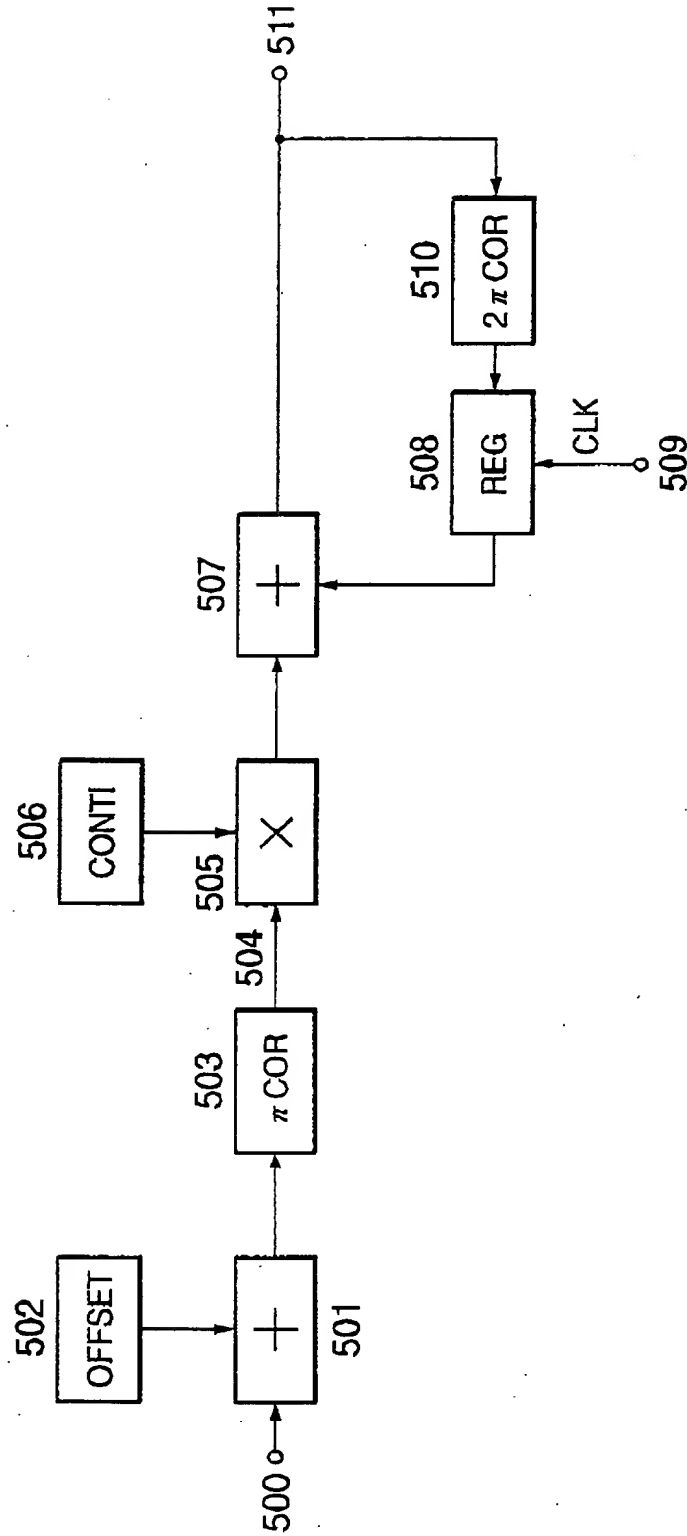PHASE CONTINUOUS DIFFERENTIAL CODING CIRCUIT (DP-CP)
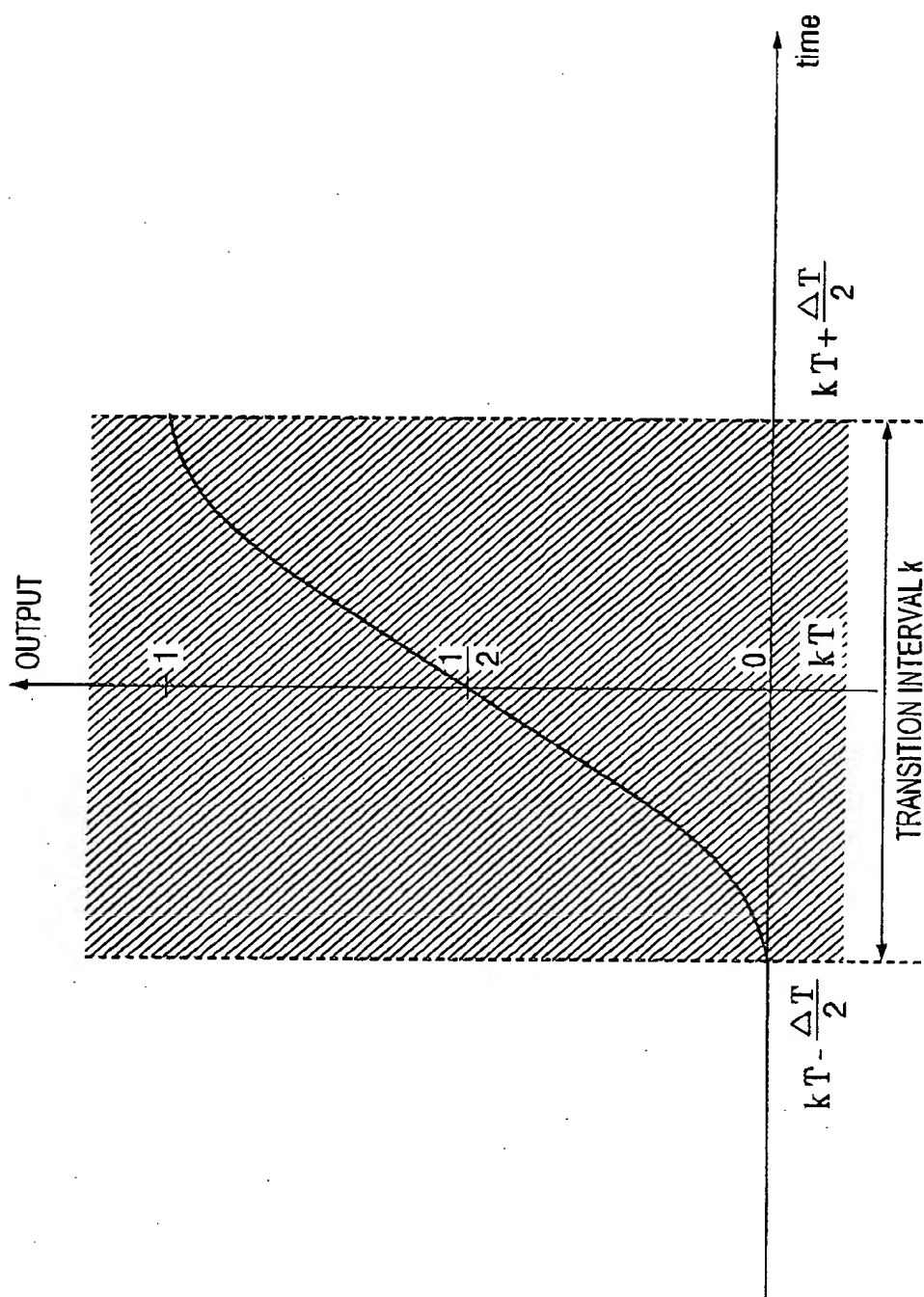
FIG.8

TIME RESPONSE OF CONTINUATING CIRCUIT (CONTI)

OUTPUT

time

$kT - \dfrac{\triangle T}{2}$

kT

$kT + \dfrac{\triangle T}{2}$

TRANSITION INTERVAL k

1

$\dfrac{1}{2}$

0

FIG. 9

EXAMPLE OF A DETAILED CONFIGURATION OF PHASE CONTINUATING CIRCUIT (CP)
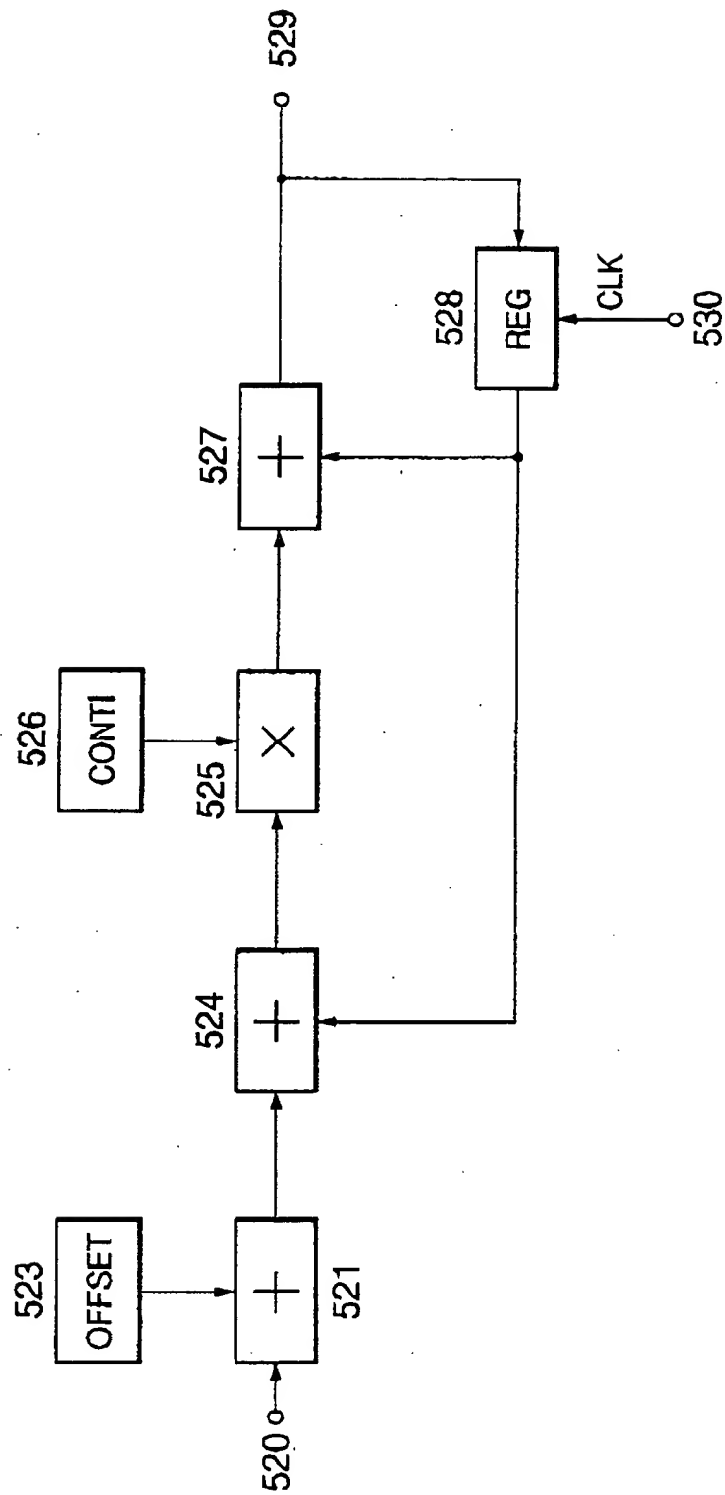
FIG. 10

SCHEMATIC VIEW OF PRIMARY MODULATED WAVEFORM

SYMBOL INTERVAL 1

SYMBOL INTERVAL 2

TRANSITION INTERVAL 1

TRANSITION INTERVAL 2

TRANSITION INTERVAL 3

$\frac{\Delta T}{2}$

$T - \frac{\Delta T}{2}$

T

$T + \frac{\Delta T}{2}$

$2T - \frac{\Delta T}{2}$

$2T$

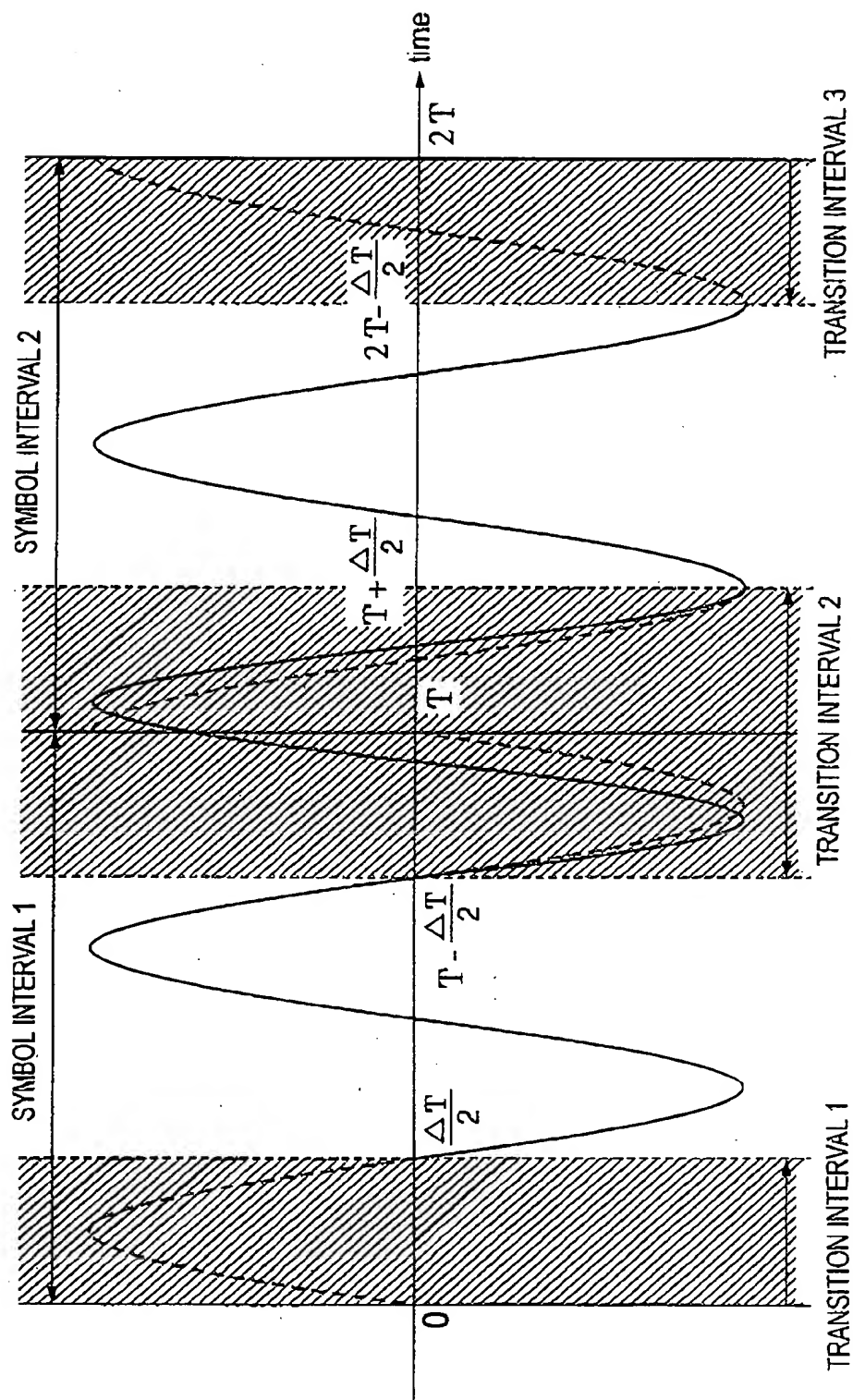time

0

FIG.11
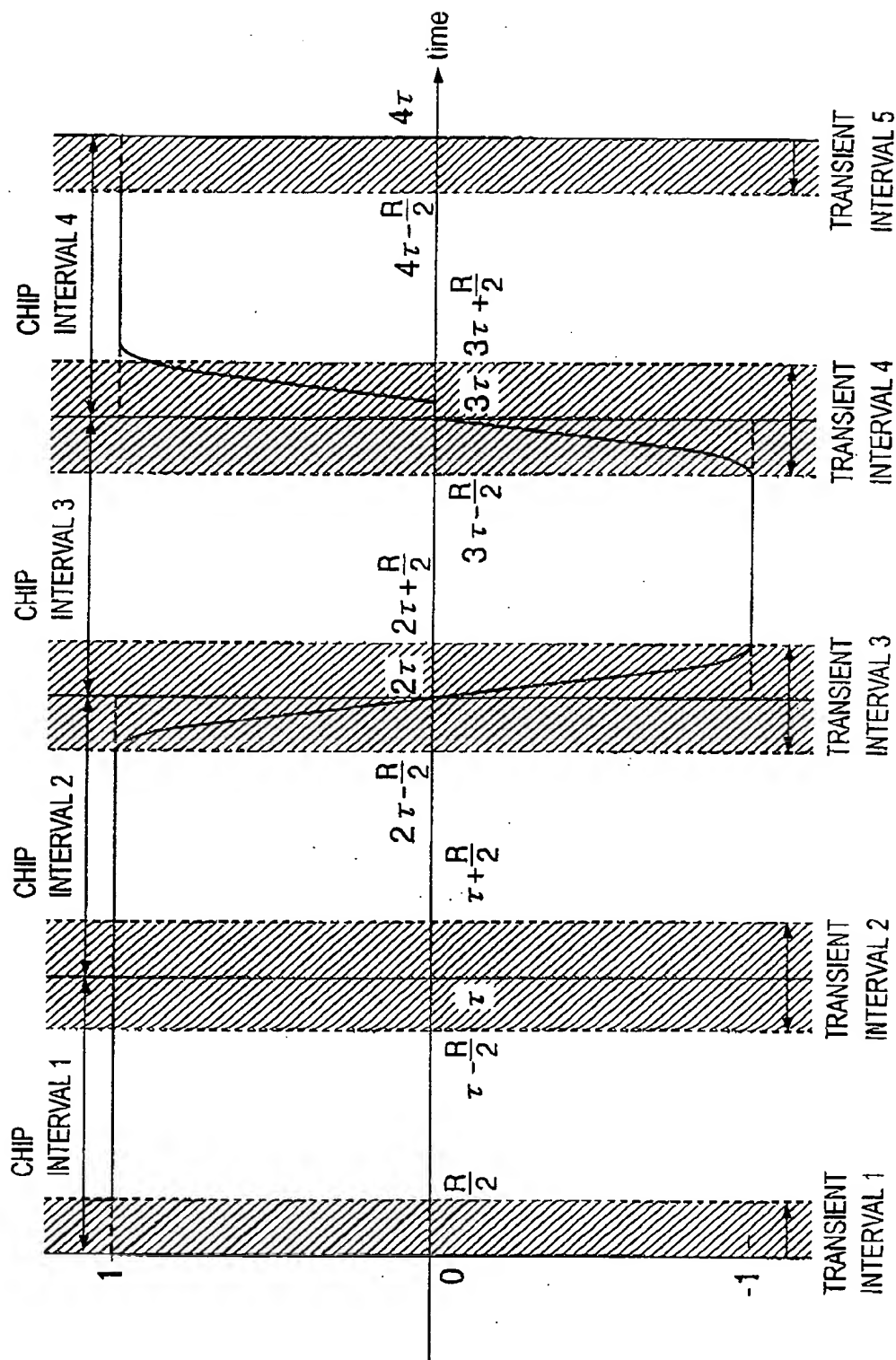
SCHEMATIC VIEW OF SPREAD CODE SEQUENCE WAVEFORM

FIG. 12

EXAMPLE OF A DETAILED CONFIGURATION OF SPREAD CODE SEQUENCE WAVEFORM
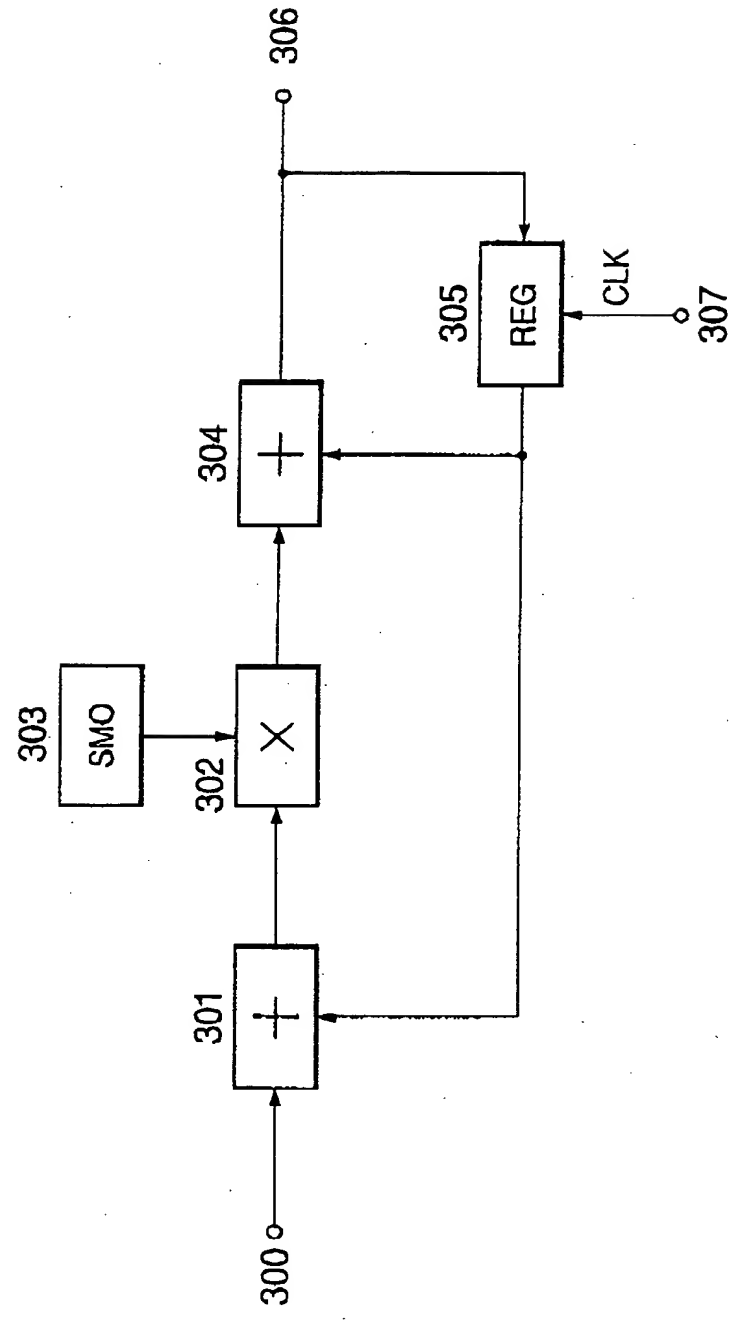CONTINUATING CIRCUIT (CODE-CS)

FIG. 13

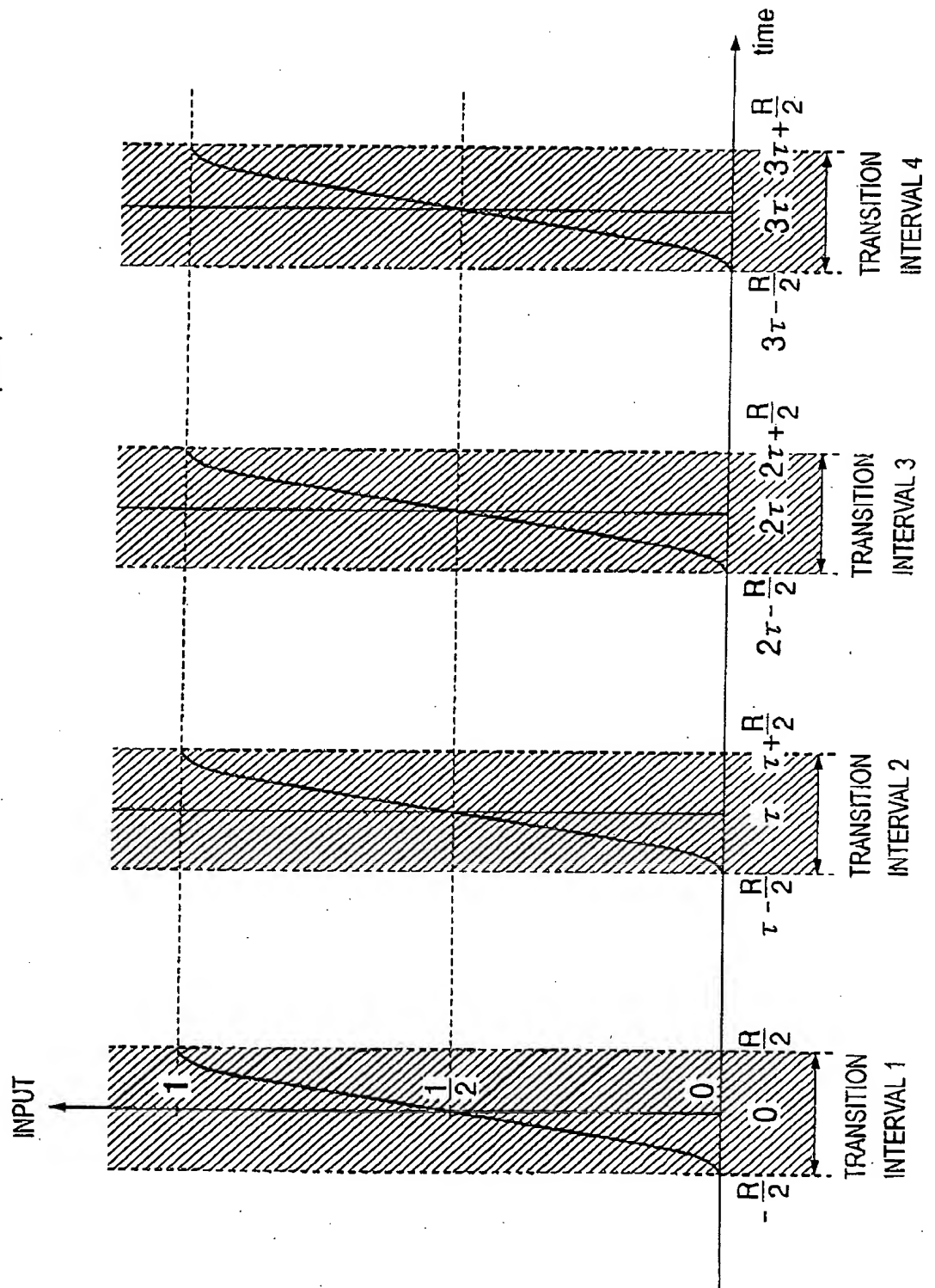EXAMPLE OF TIME RESPONSE WAVEFORM OF SMOOTHER (SMO)

FIG.14

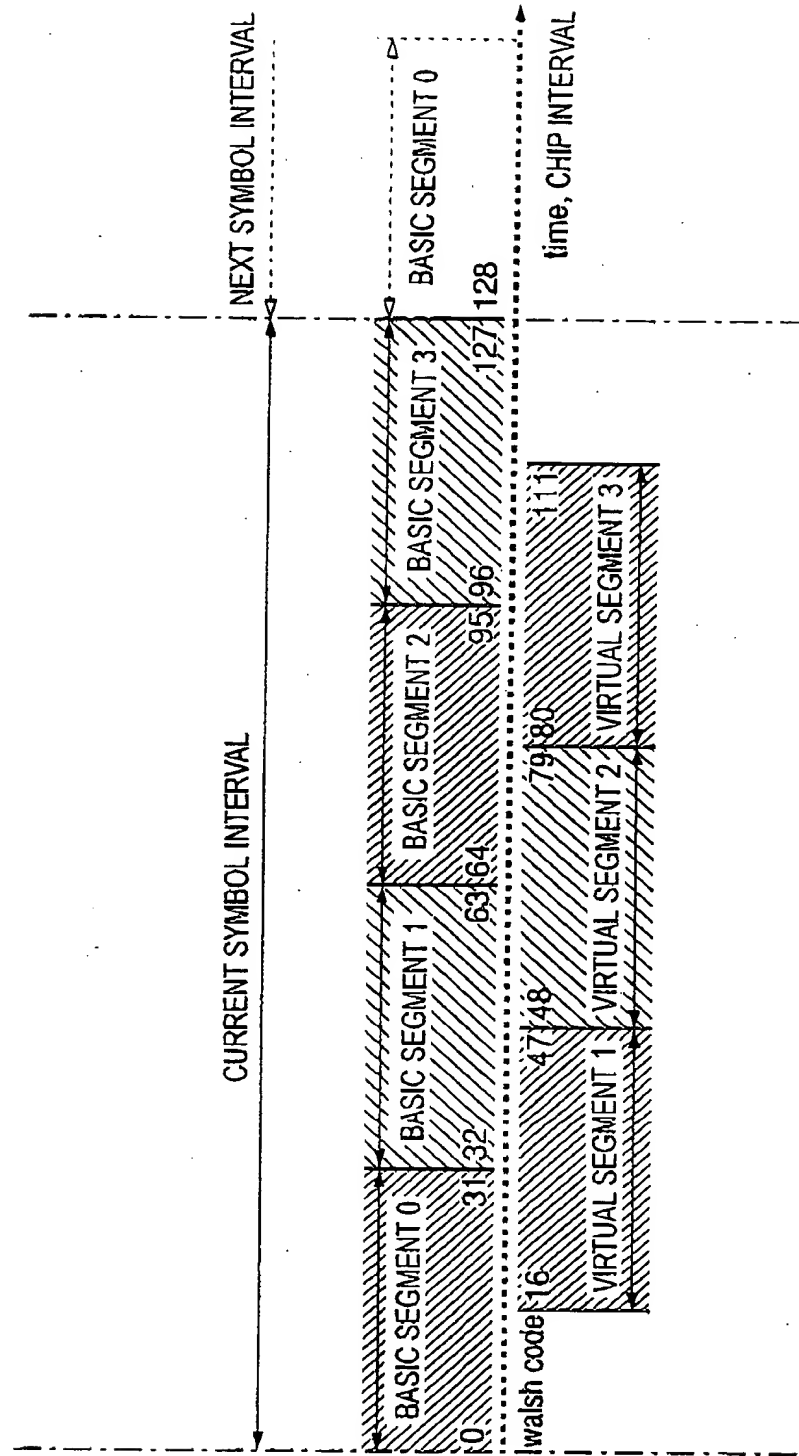EXAMPLE OF VIRTUAL SEGMENT INTERLEAVE STRUCTURE

FIG. 15

EXAMPLE OF A DETAILED CONFIGURATION OF VIRTUAL SEGMENT INTERLEAVE
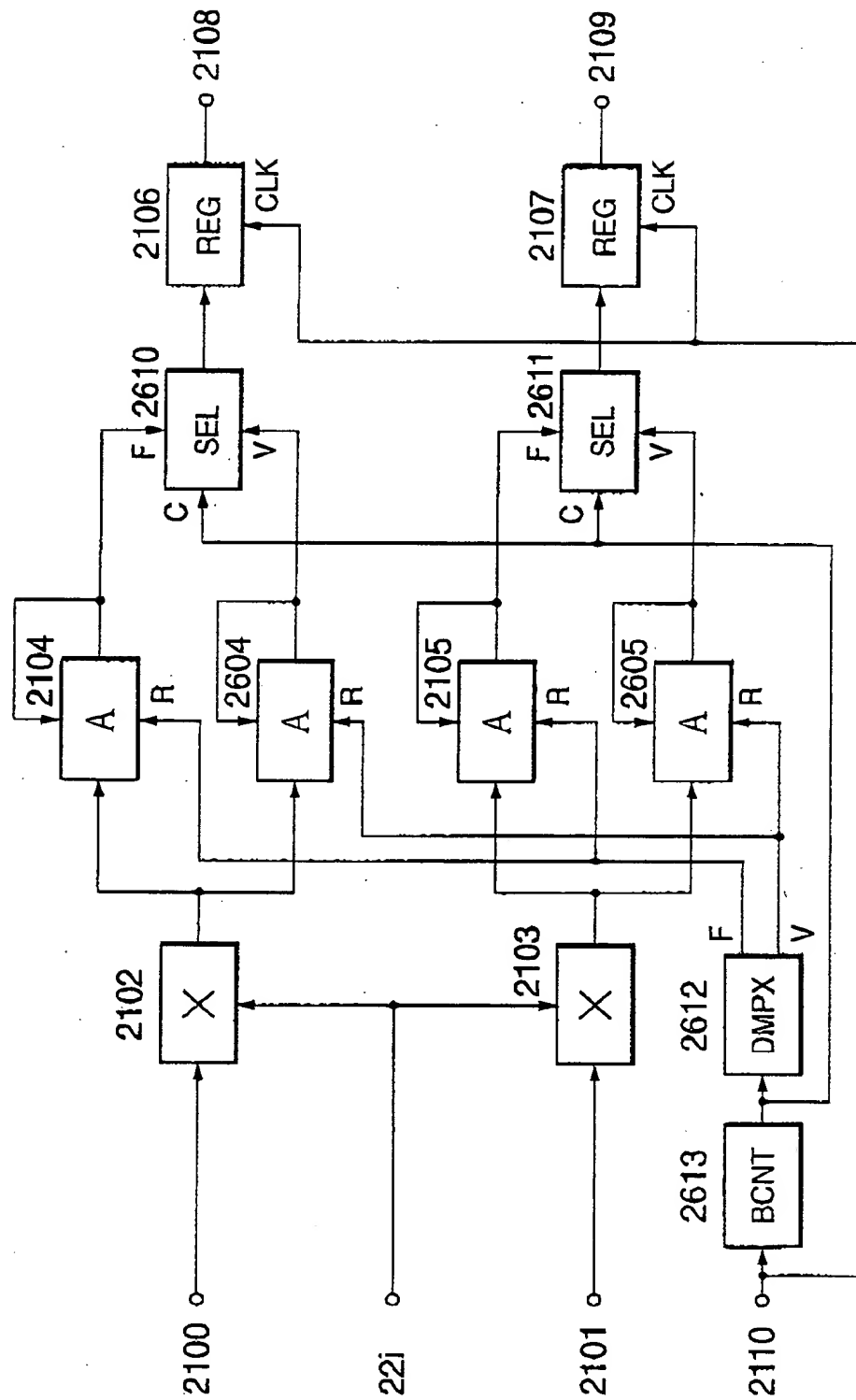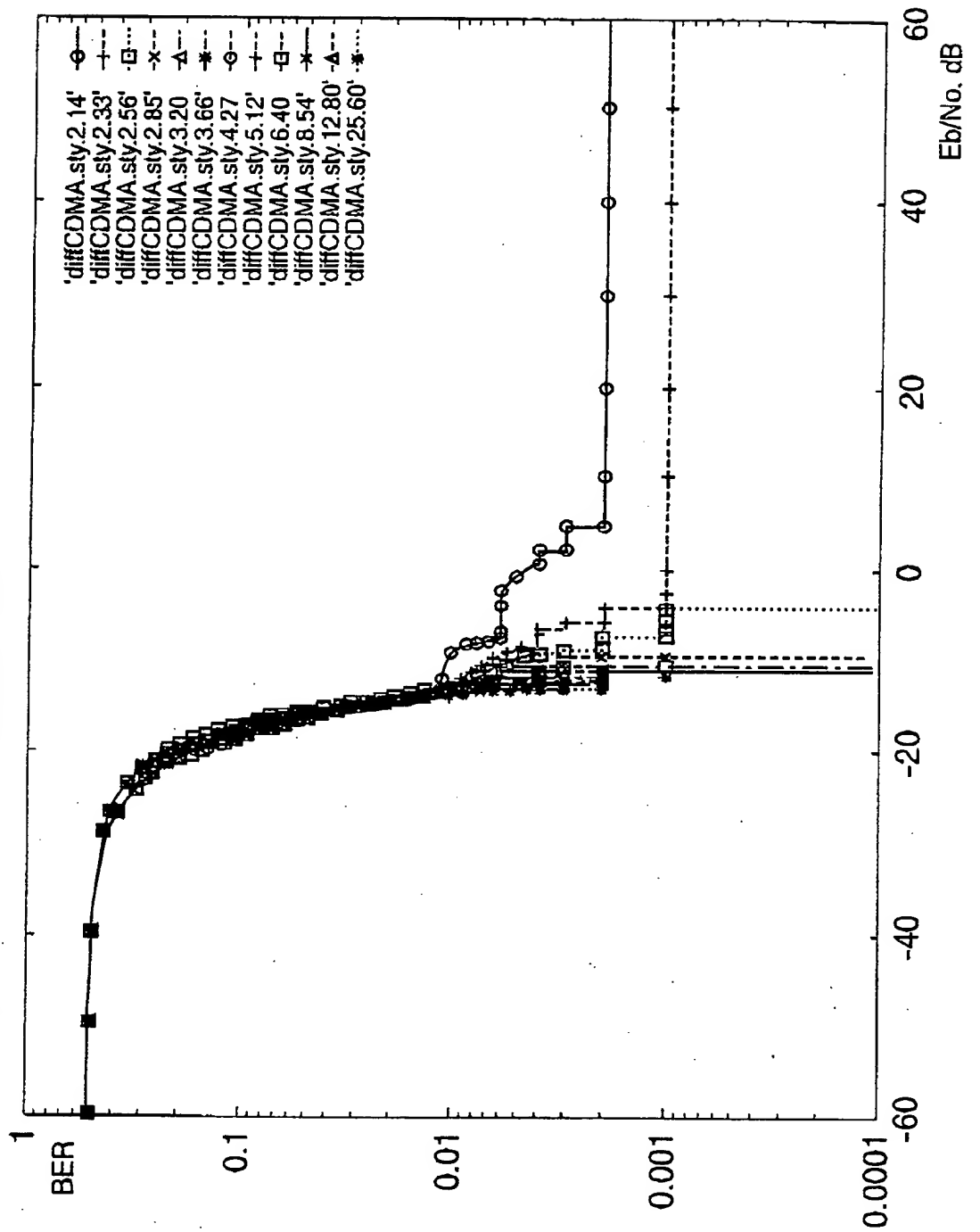DESPREADING CIRCUIT (deSS-VSI)

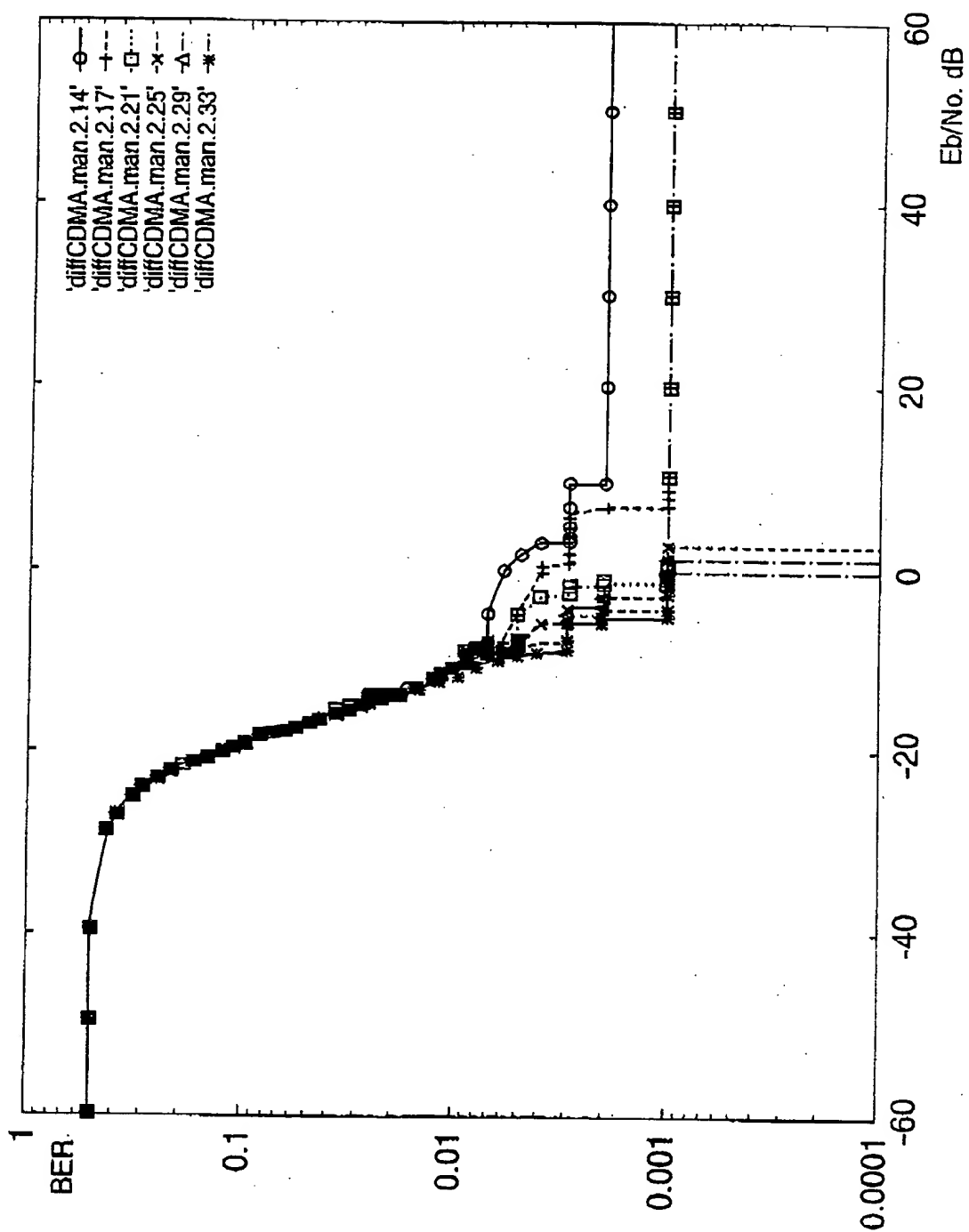# FIG.16

TRANSMISSION CHARACTERISTICS IN STATIONARY TELEPHONE MODE OF
DIFFERENTIAL CDMA TRANSMISSION SYSTEM

FIG. 17

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
DIFFERENTIAL CDMA TRANSMISSION SYSTEM

FIG. 18

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF
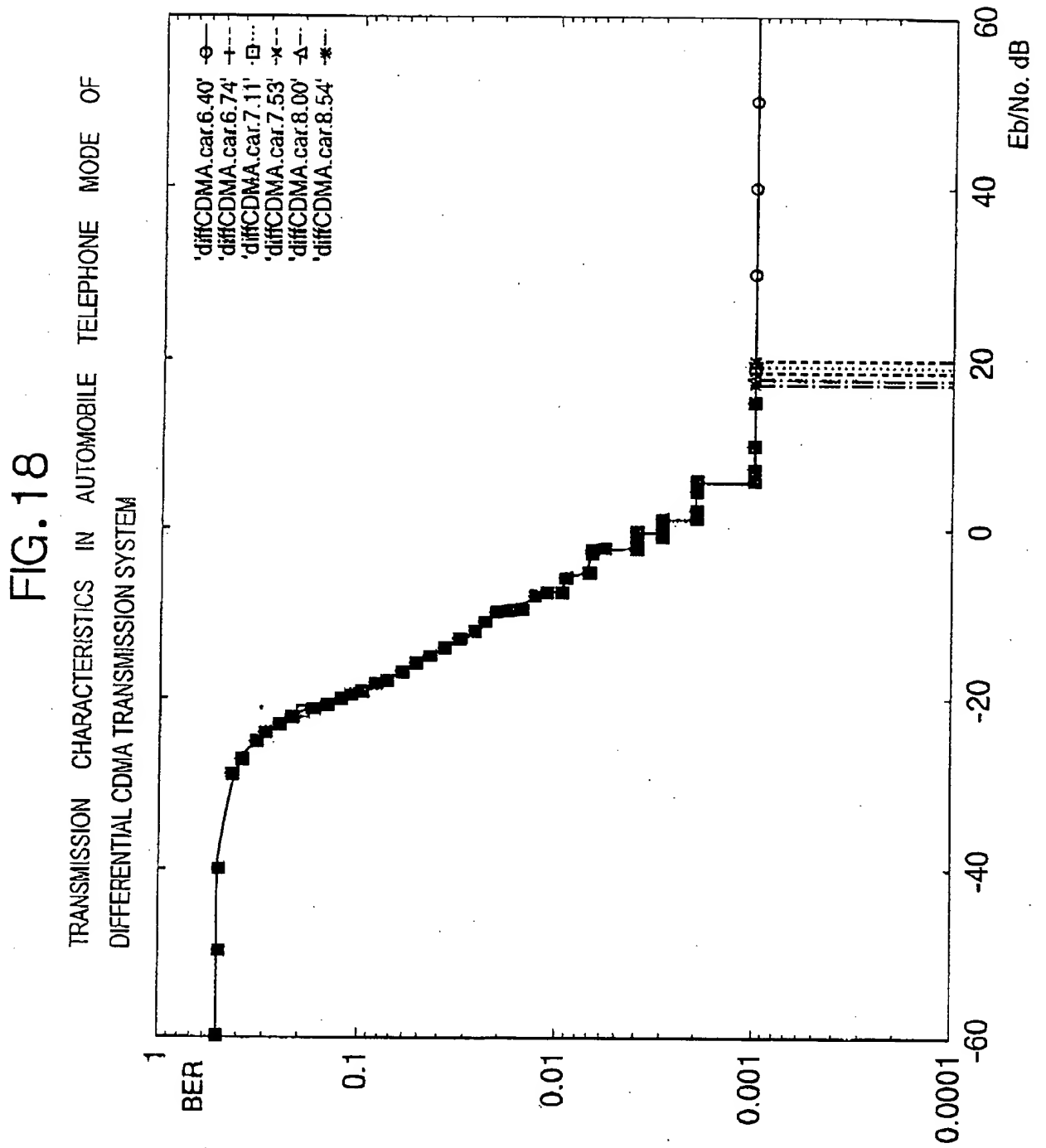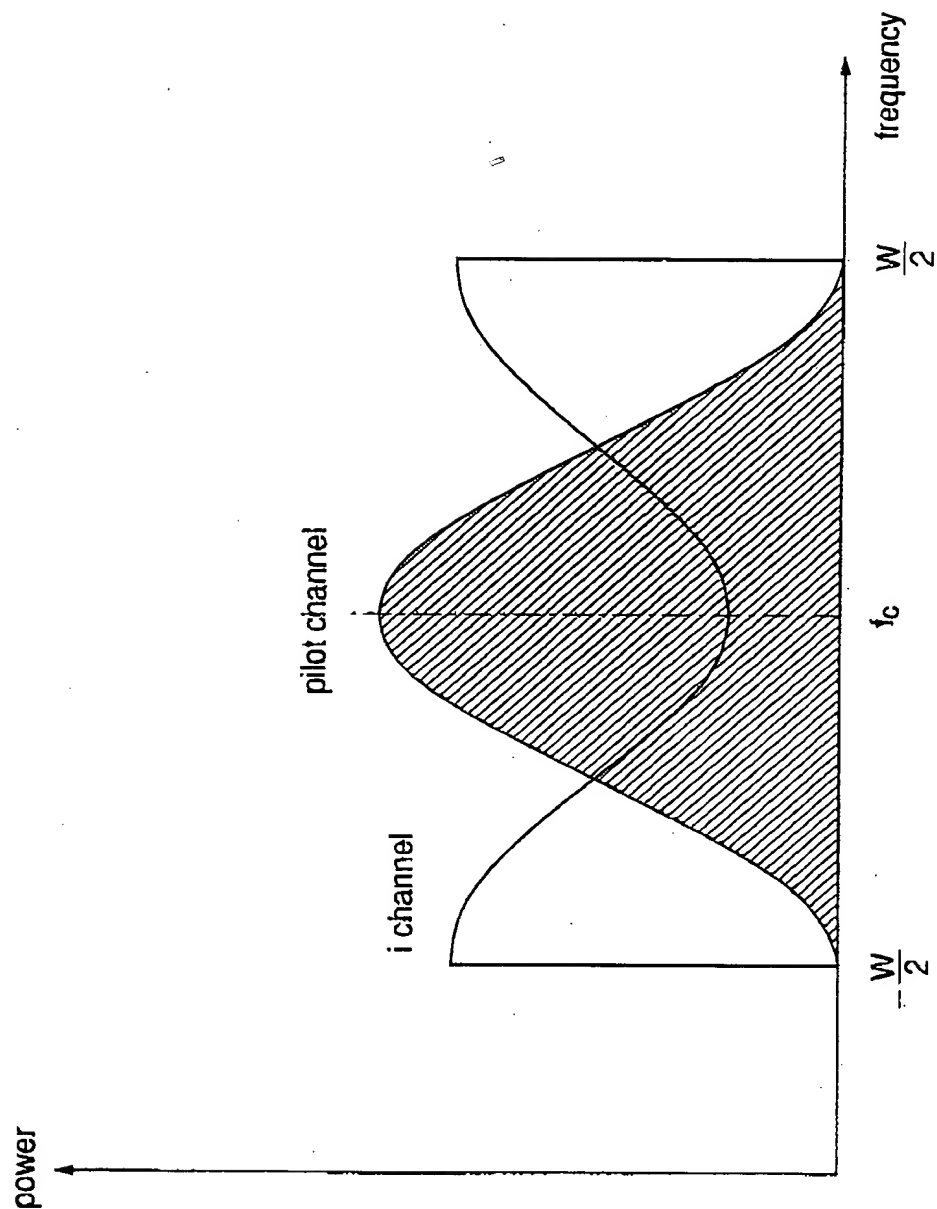DIFFERENTIAL CDMA TRANSMISSION SYSTEM
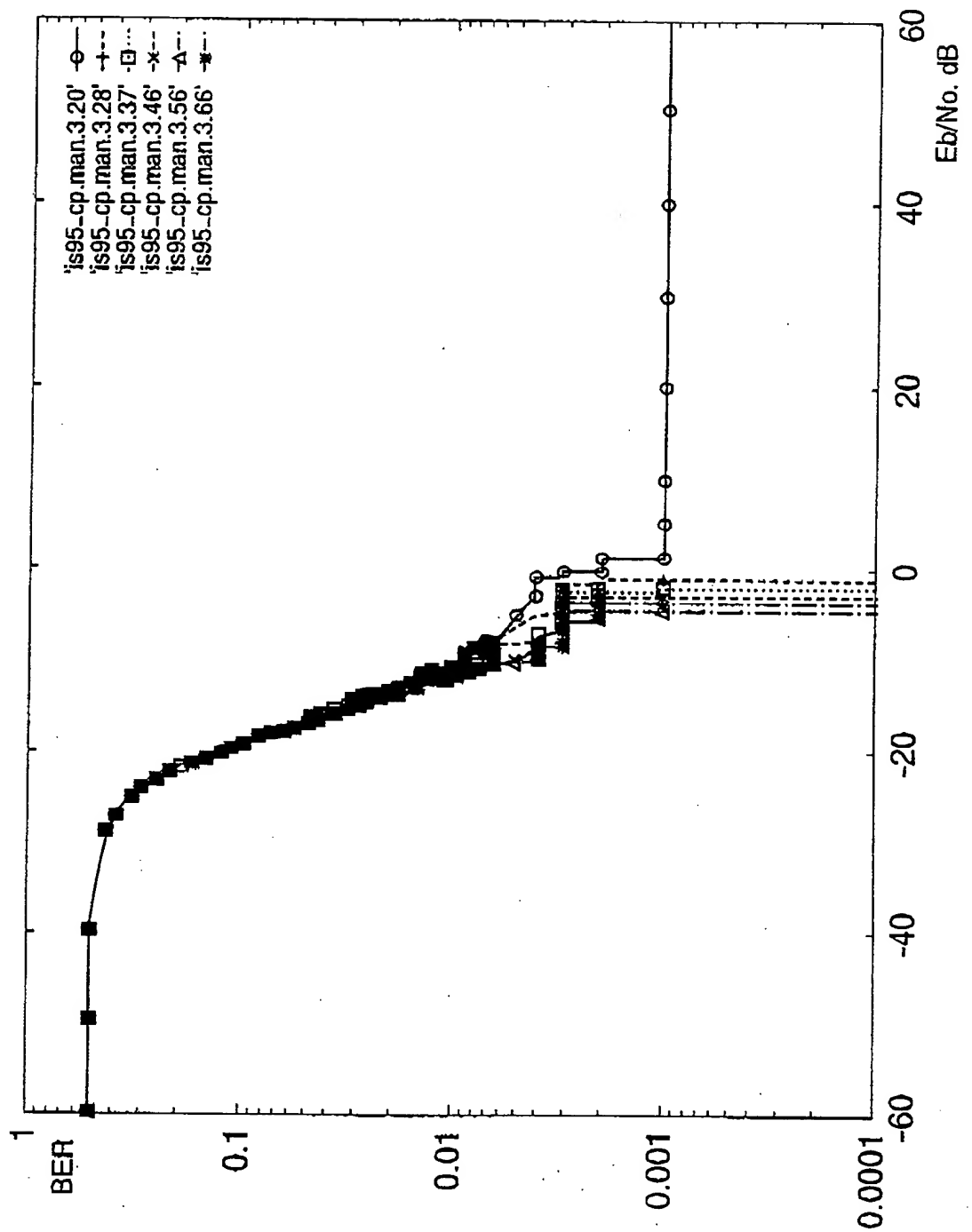
FIG. 19

SCHEMATIC POWER SPECTRUM

FIG.20

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
PHASE CONTINUOUS PILOT CDMA TRANSMISSION SYSTEM

FIG.21

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
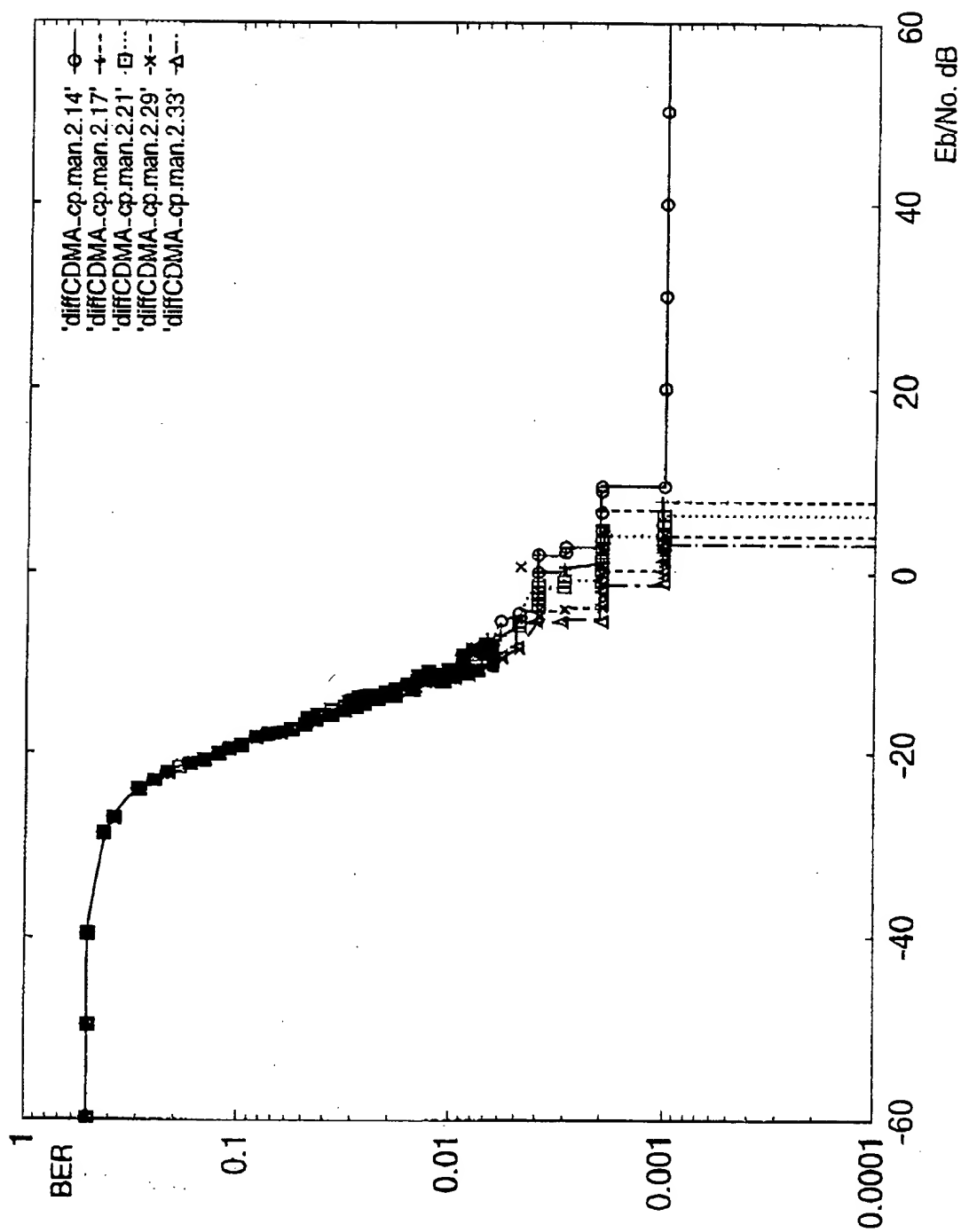PHASE CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM

'diffCDMA-cp.man.2.14'
'diffCDMA-cp.man.2.17'
'diffCDMA-cp.man.2.21'
'diffCDMA-cp.man.2.29'
'diffCDMA-cp.man.2.33'

FIG.22

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
CHIP CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM

'diffCDMA_cs.man.2.14'
'diffCDMA_cs.man.2.17'
'diffCDMA_cs.man.2.21'
'diffCDMA_cs.man.2.29'
'diffCDMA_cs.man.2.33'
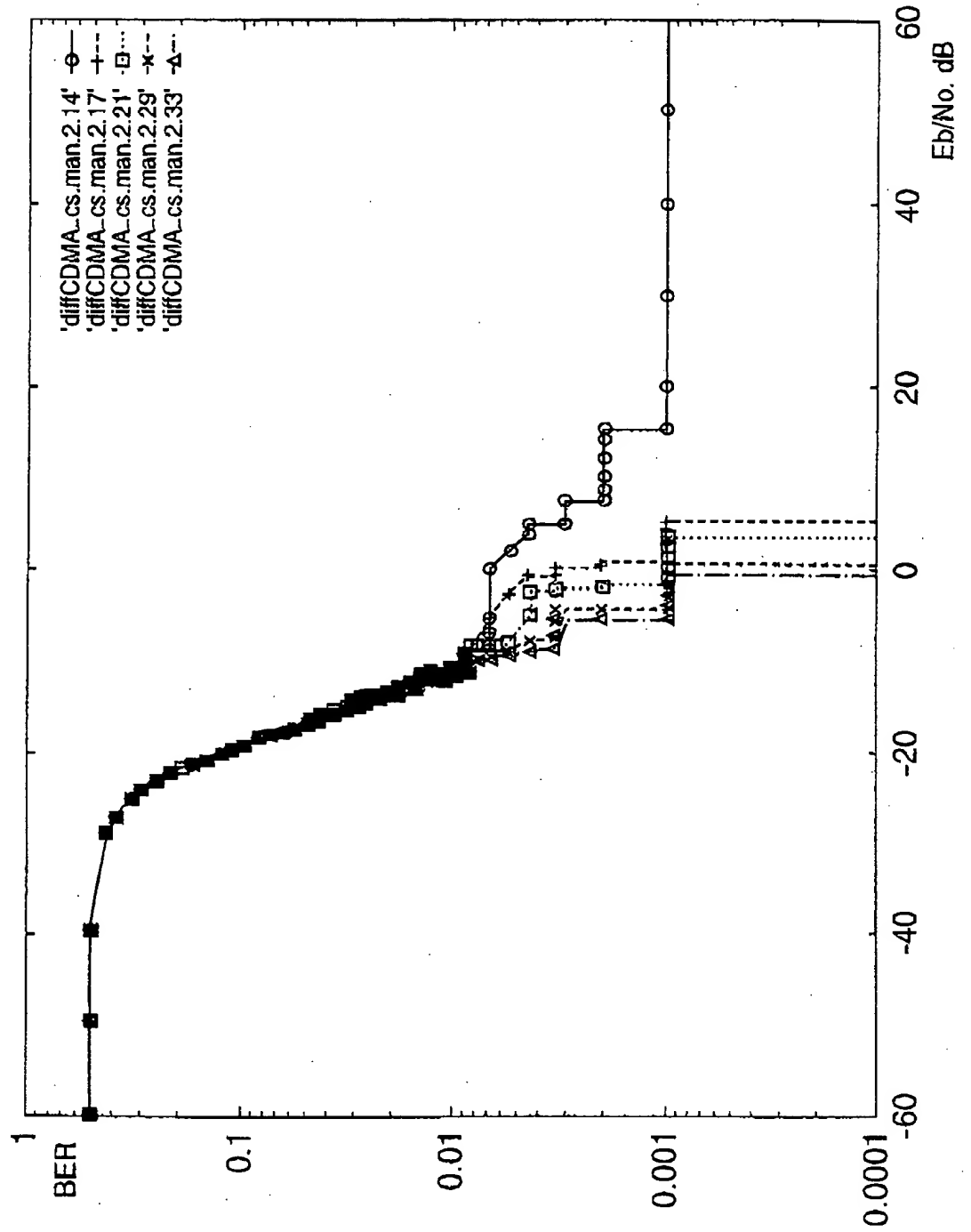
Eb/No. dB

BER

FIG.23

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
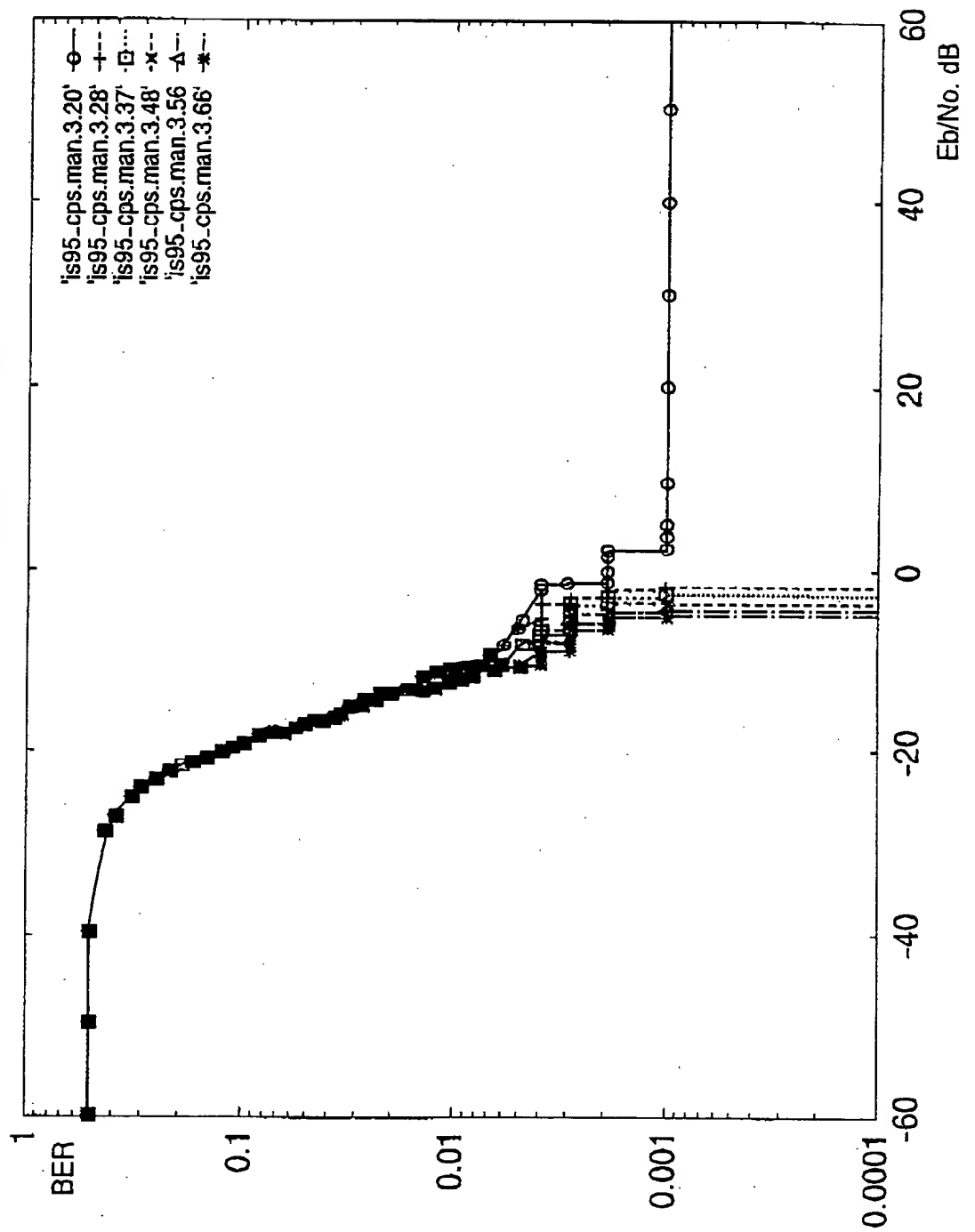PHASE/CHIP CONTINUOUS PILOT TRANSMISSION SYSTEM

FIG.24

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
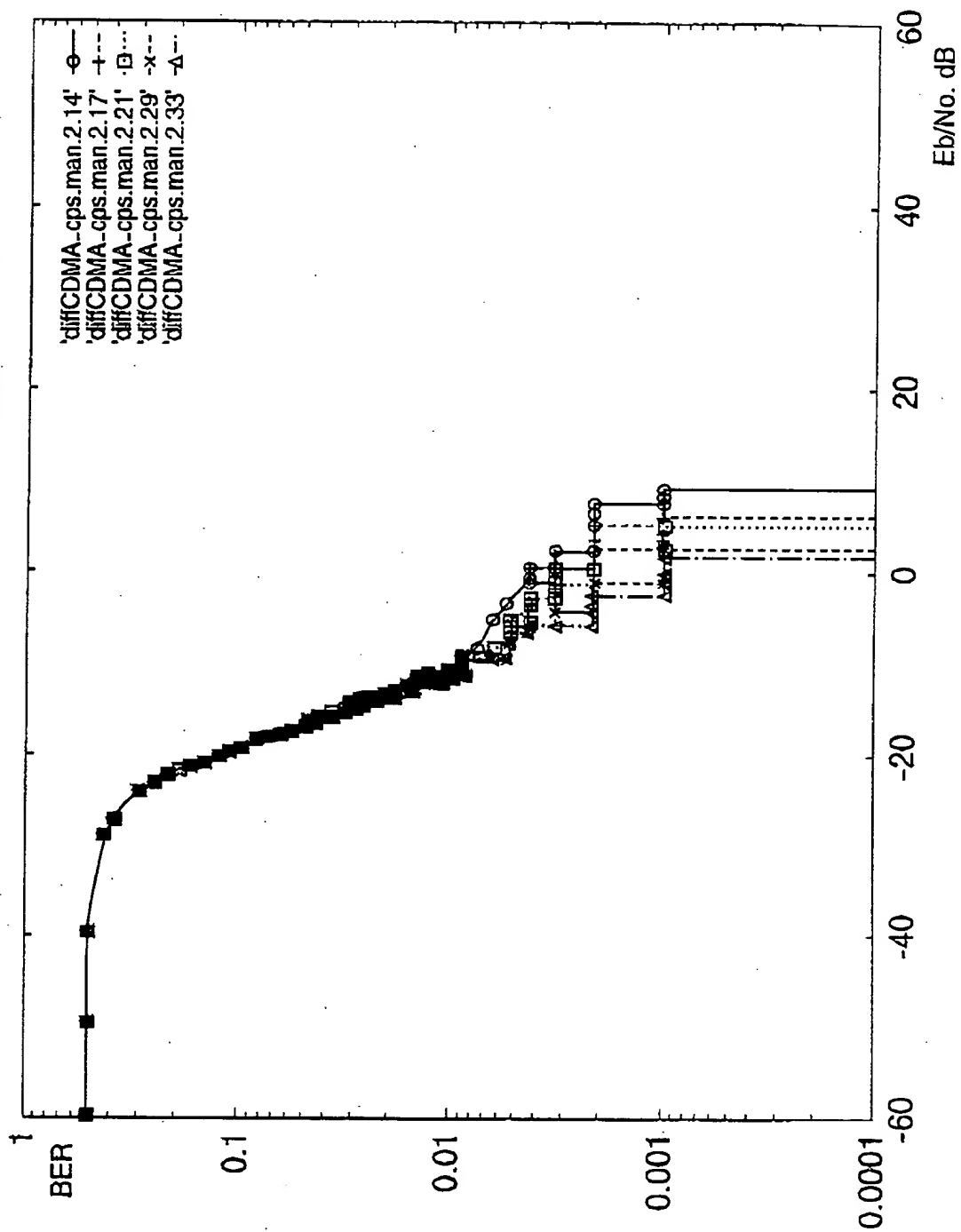PHASE/CHIP CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM

FIG.25

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF
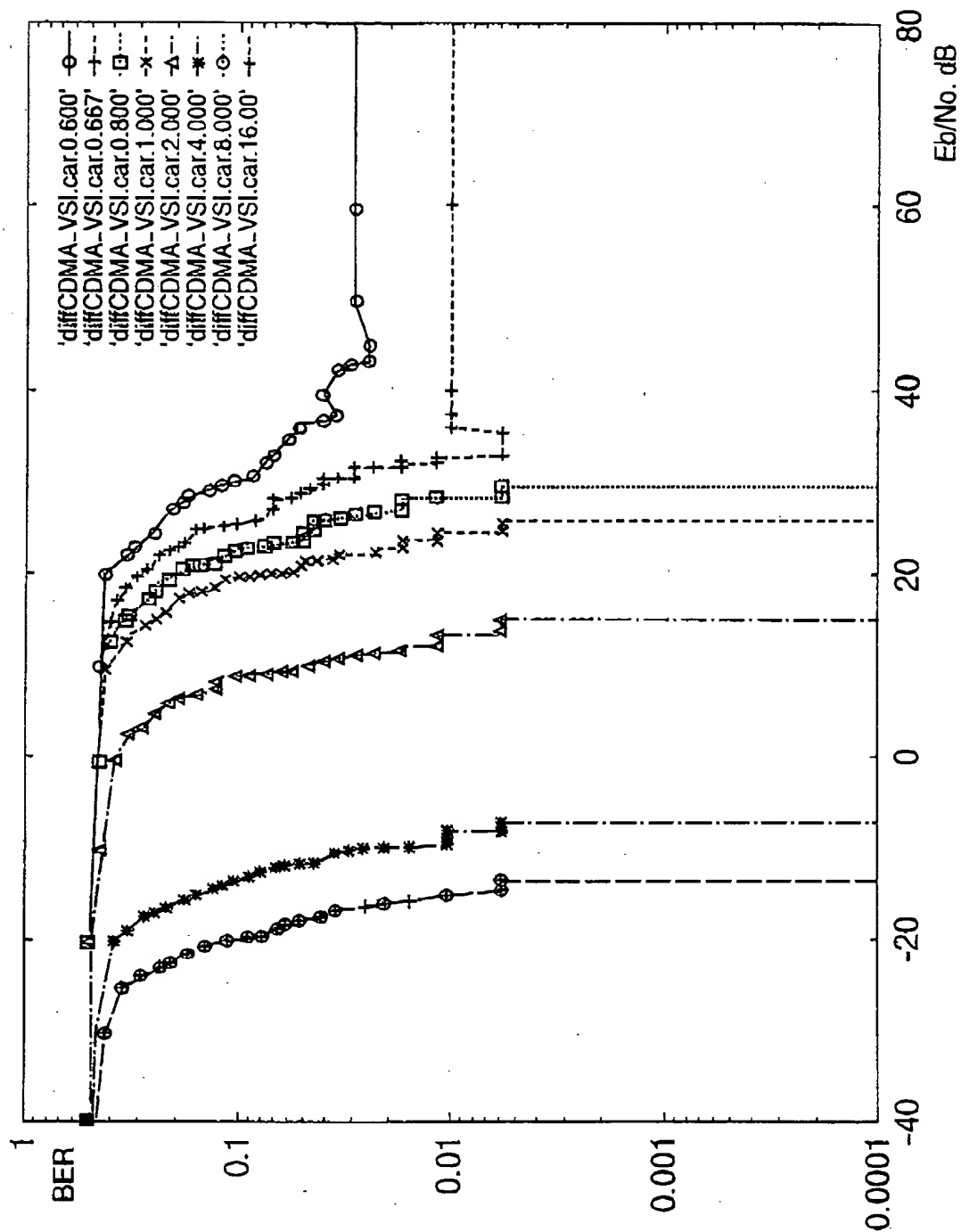VIRTUAL SEGMENT DIFFERENTIAL CDMA TRANSMISSION SYSTEM

'diffCDMA_VSI.car.0.600'
'diffCDMA_VSI.car.0.667'
'diffCDMA_VSI.car.0.800'
'diffCDMA_VSI.car.1.000'
'diffCDMA_VSI.car.2.000'
'diffCDMA_VSI.car.4.000'
'diffCDMA_VSI.car.8.000'
'diffCDMA_VSI.car.16.00'

FIG.26

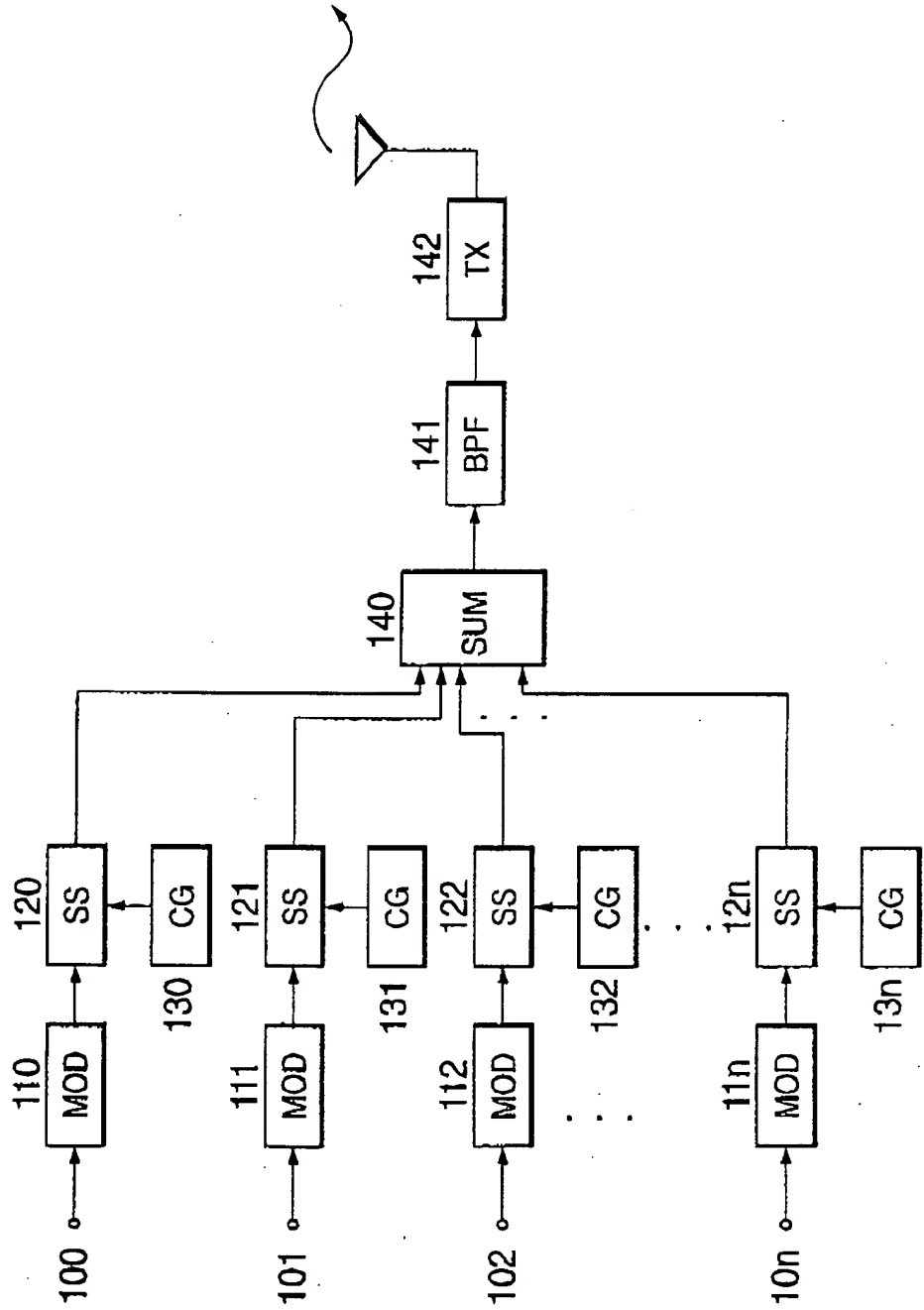EXAMPLE OF A CONFIGURATION OF THE CONVENTIONAL CDMA TRANSMITTER

FIG.27

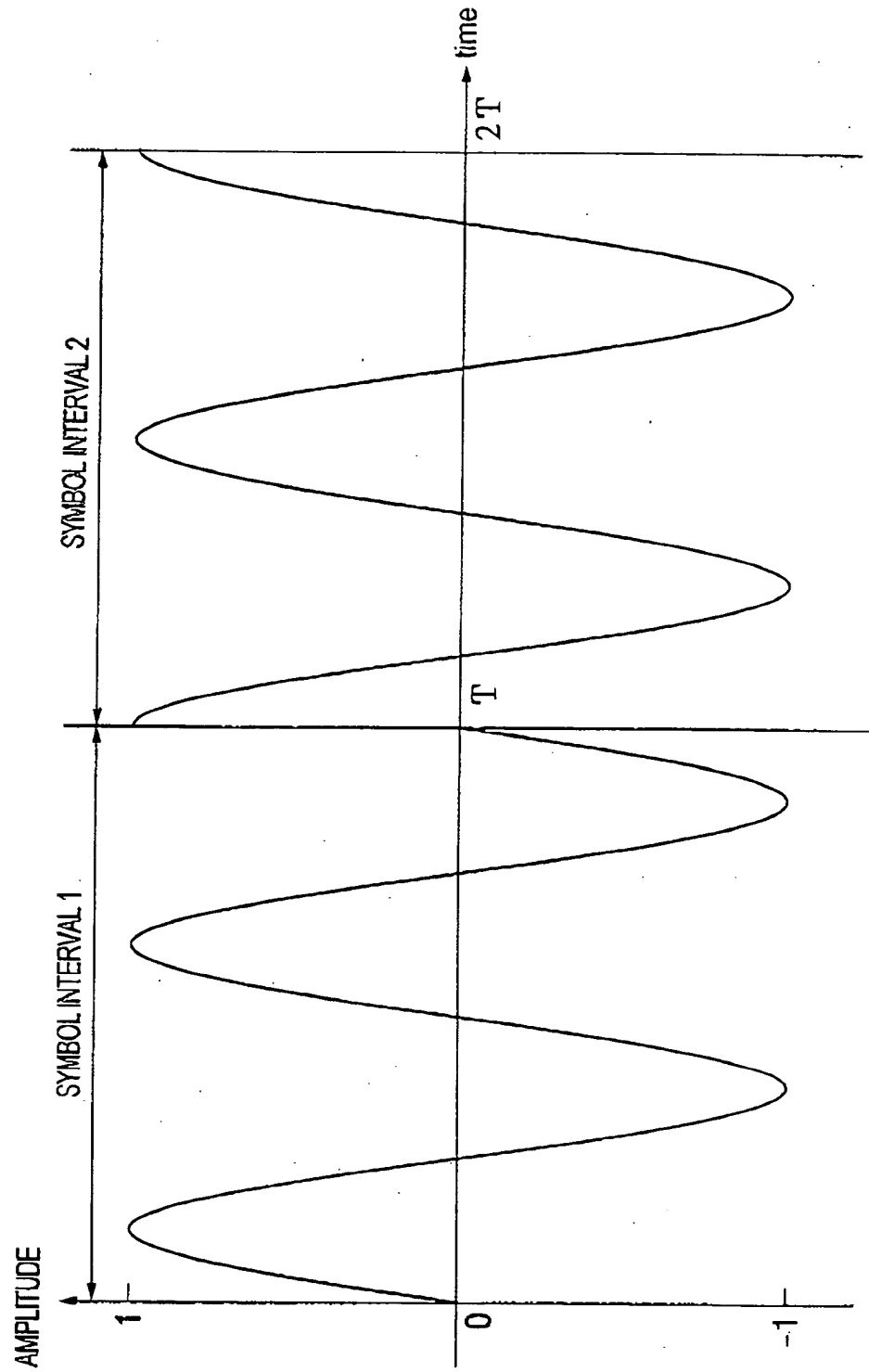SCHEMATIC VIEW OF PRIMARY MODULATED WAVE AND SYMBOL STRUCTURE
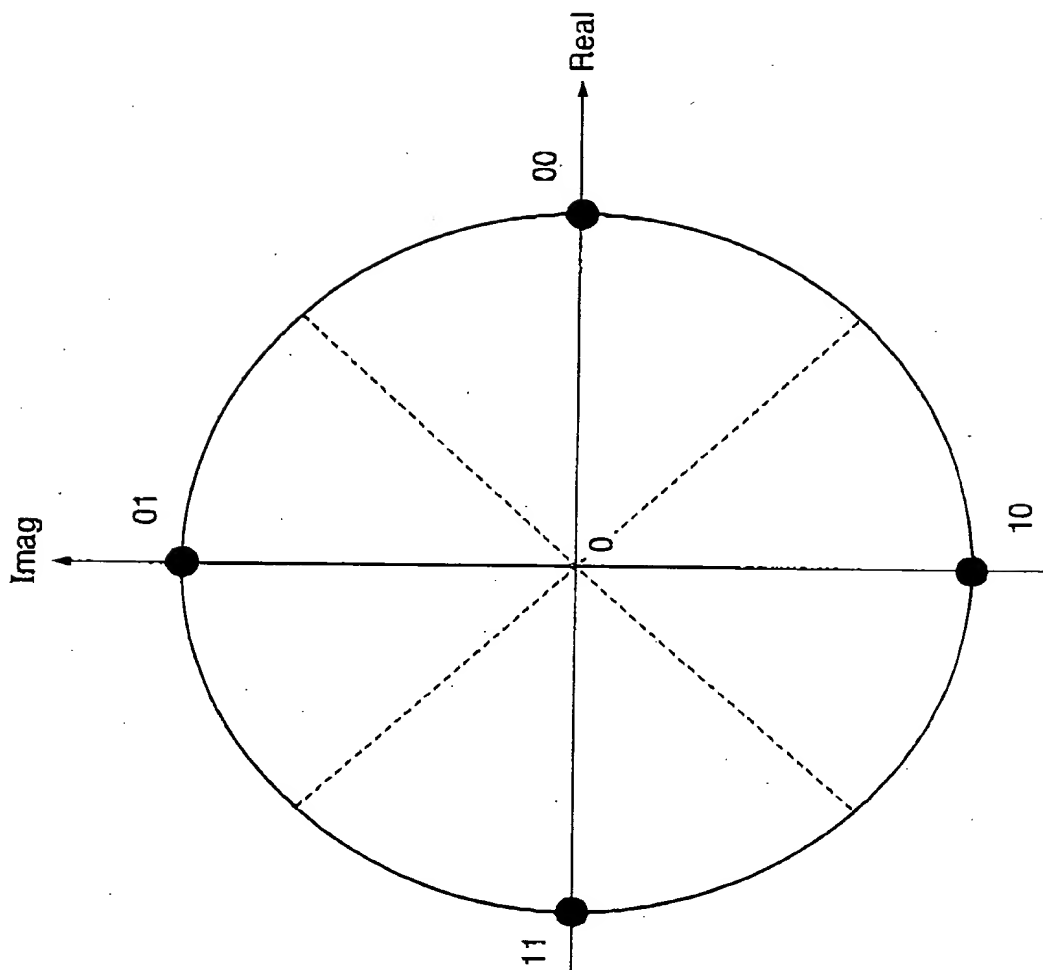
FIG.28

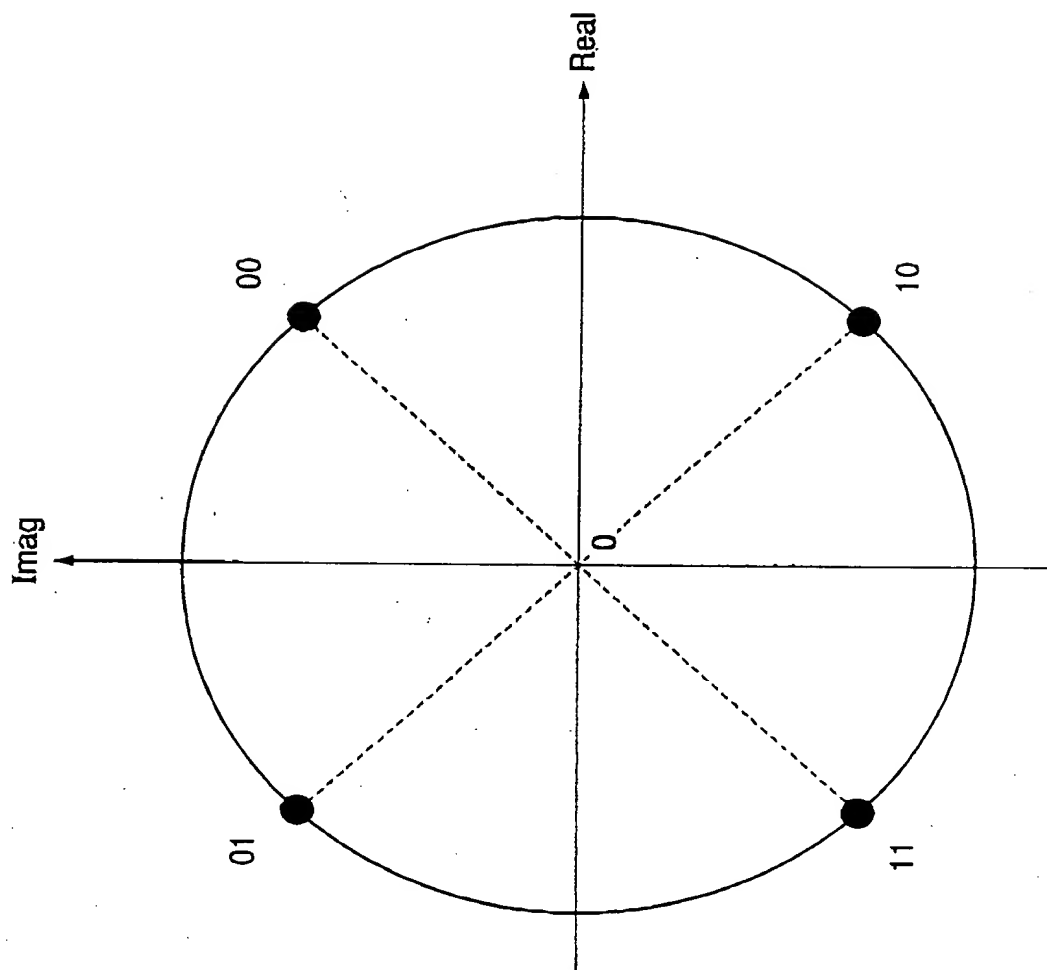EXAMPLE OF QPSK BIT CONSTELLATION

FIG.29

EXAMPLE OF $\pi/4$-SHIFTED QPSK BIT CONSTELLATION

FIG.30

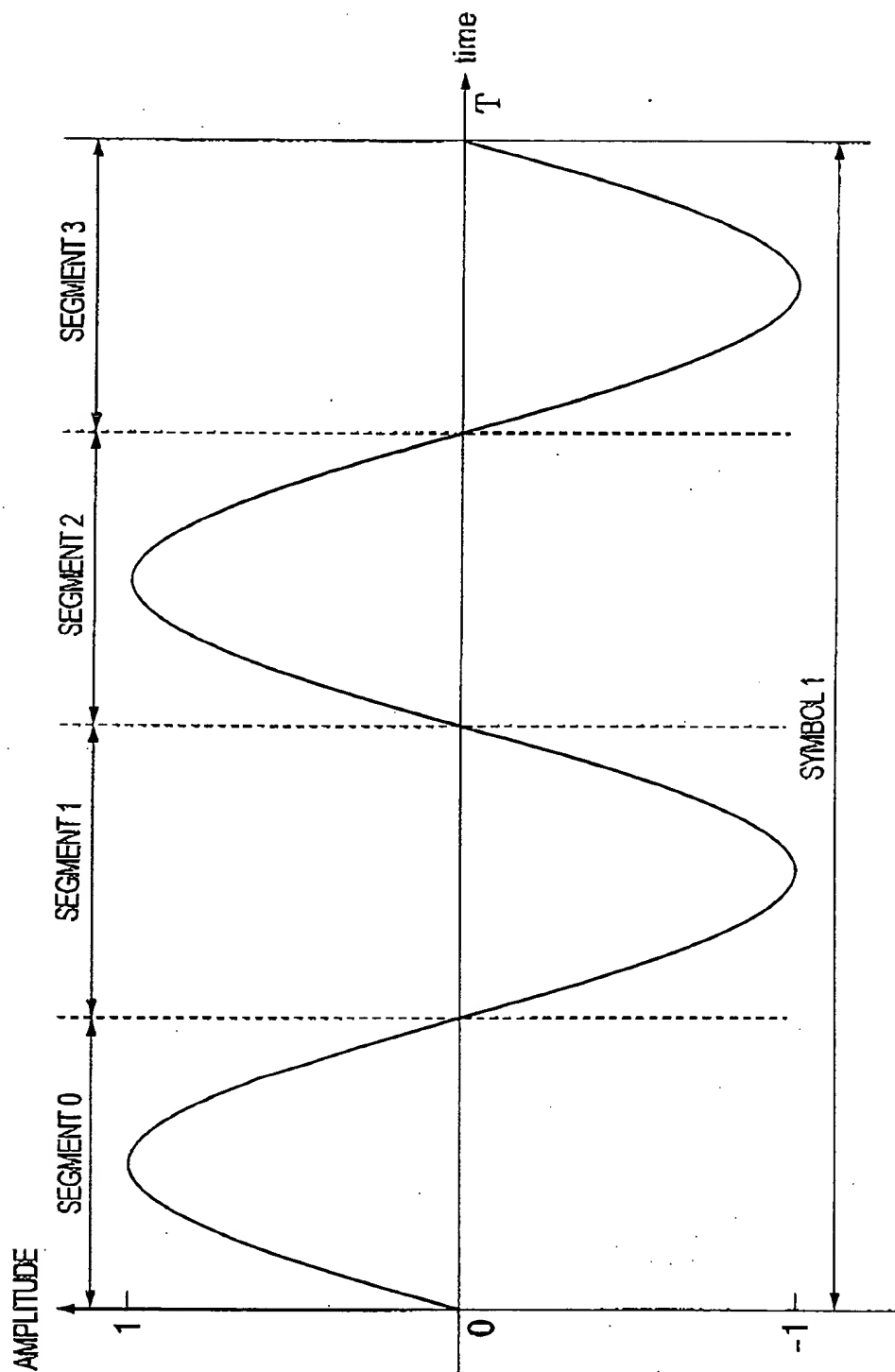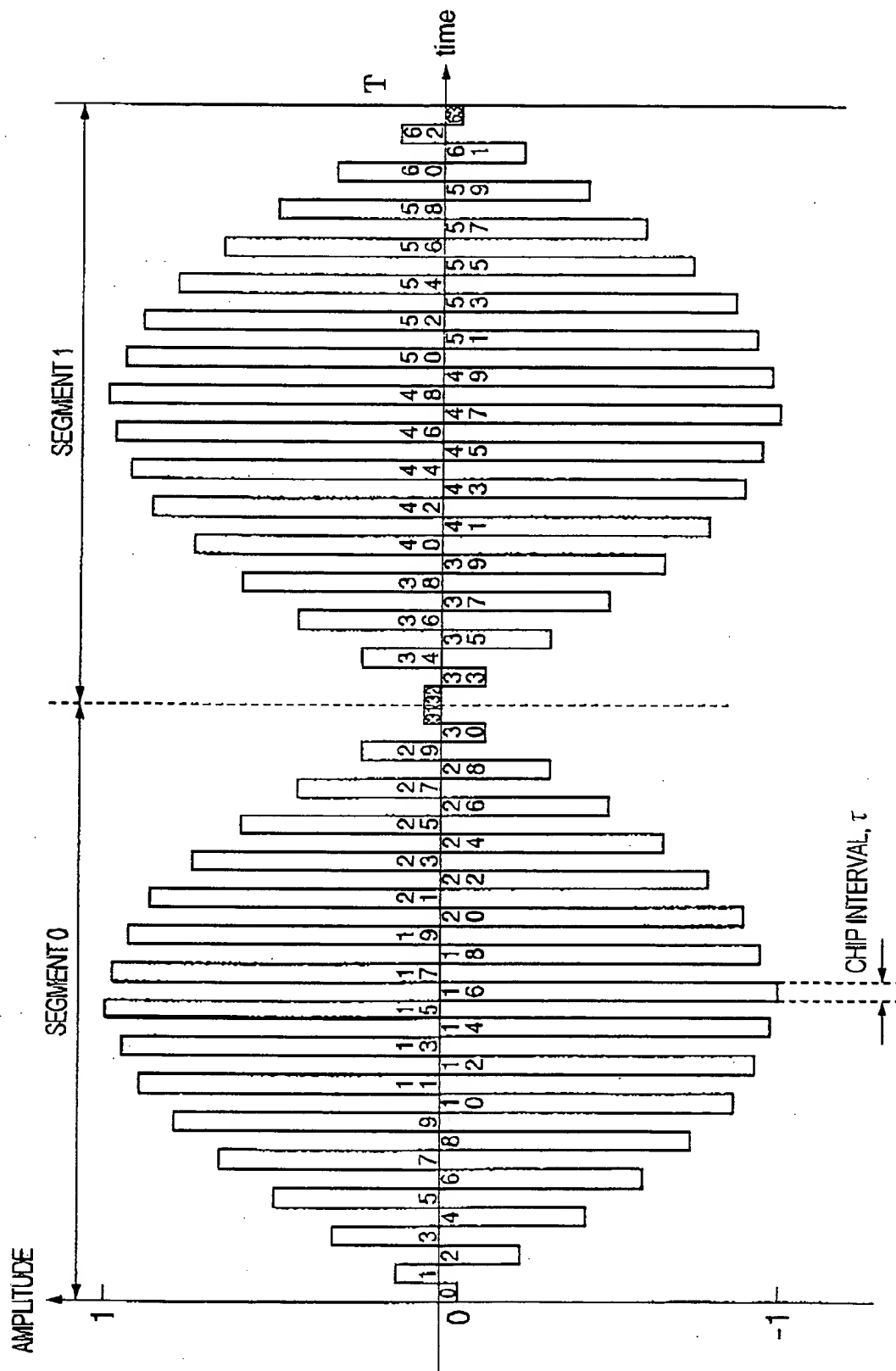EXAMPLE OF SEGMENT STRUCTURE IN A SYMBOL INTERVAL OF PRIMARY MODULATED WAVE

FIG. 31

EXAMPLE OF CHIP STRUCTURE IN A SEGMENT INTERVAL OF PRIMARY MODULATED WAVE

FIG.32

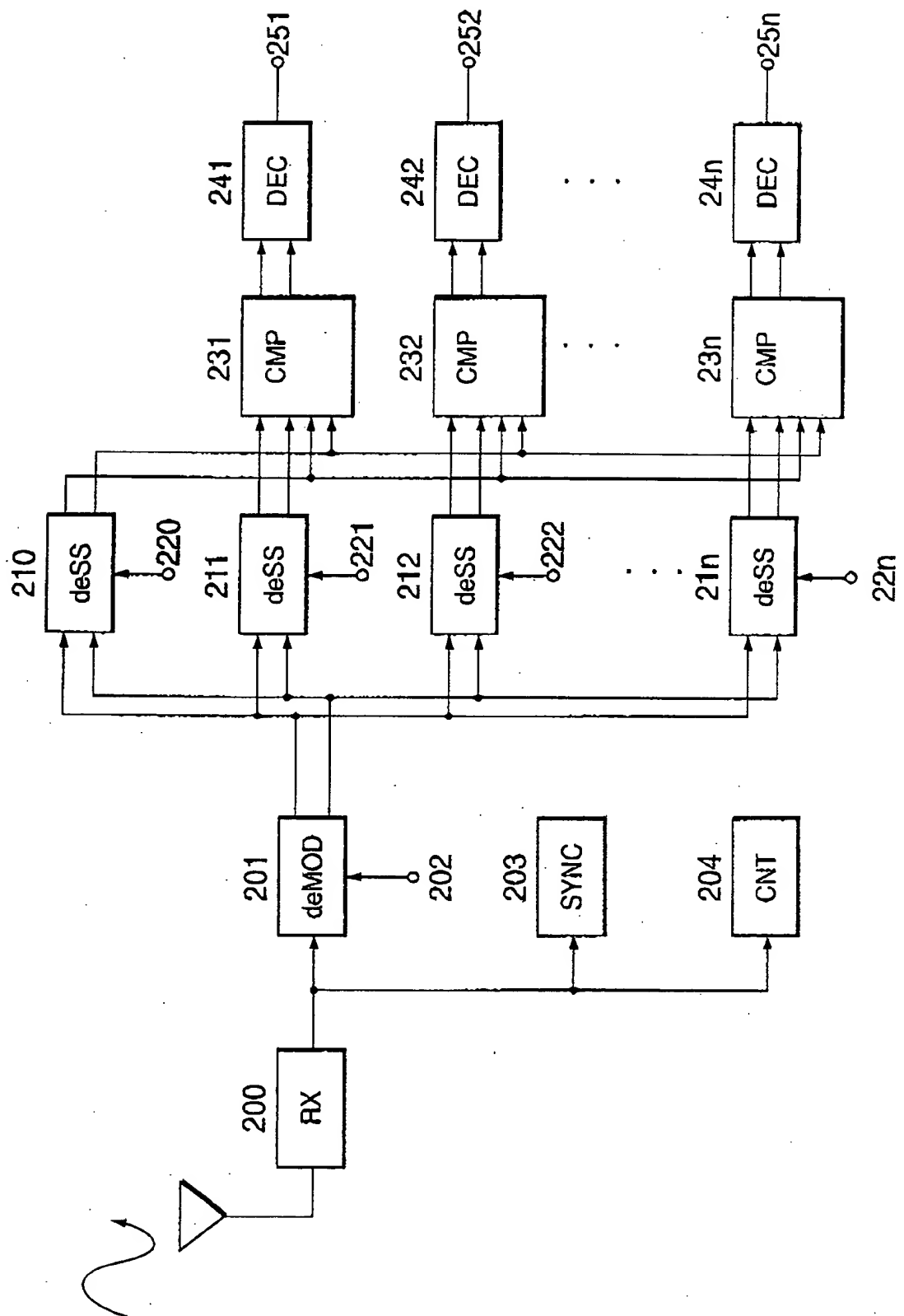EXAMPLE OF A CONFIGURATION OF THE CONVENTIONAL CDMA RECEIVER

FIG.33

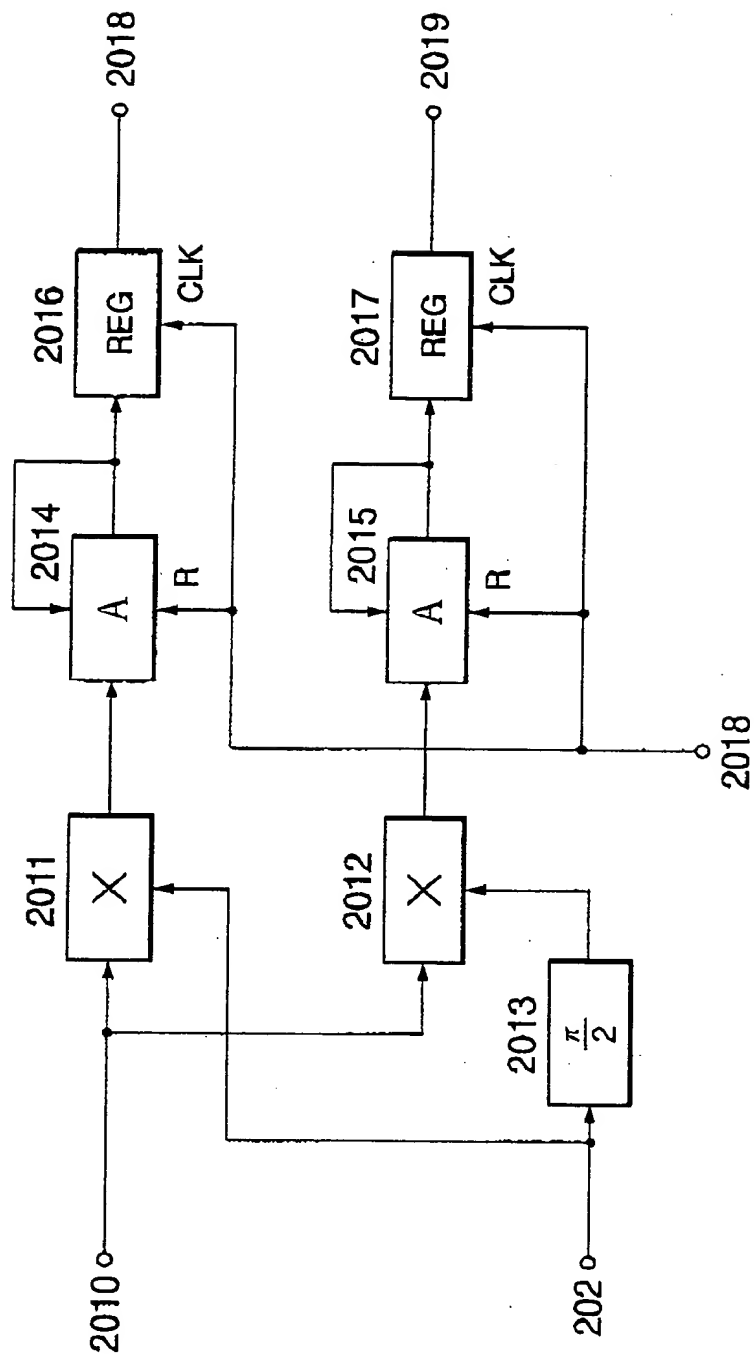EXAMPLE OF A DETAILED CONFIGURATION OF DEMODULATOR CIRCUIT (de MOD)

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FIG.34

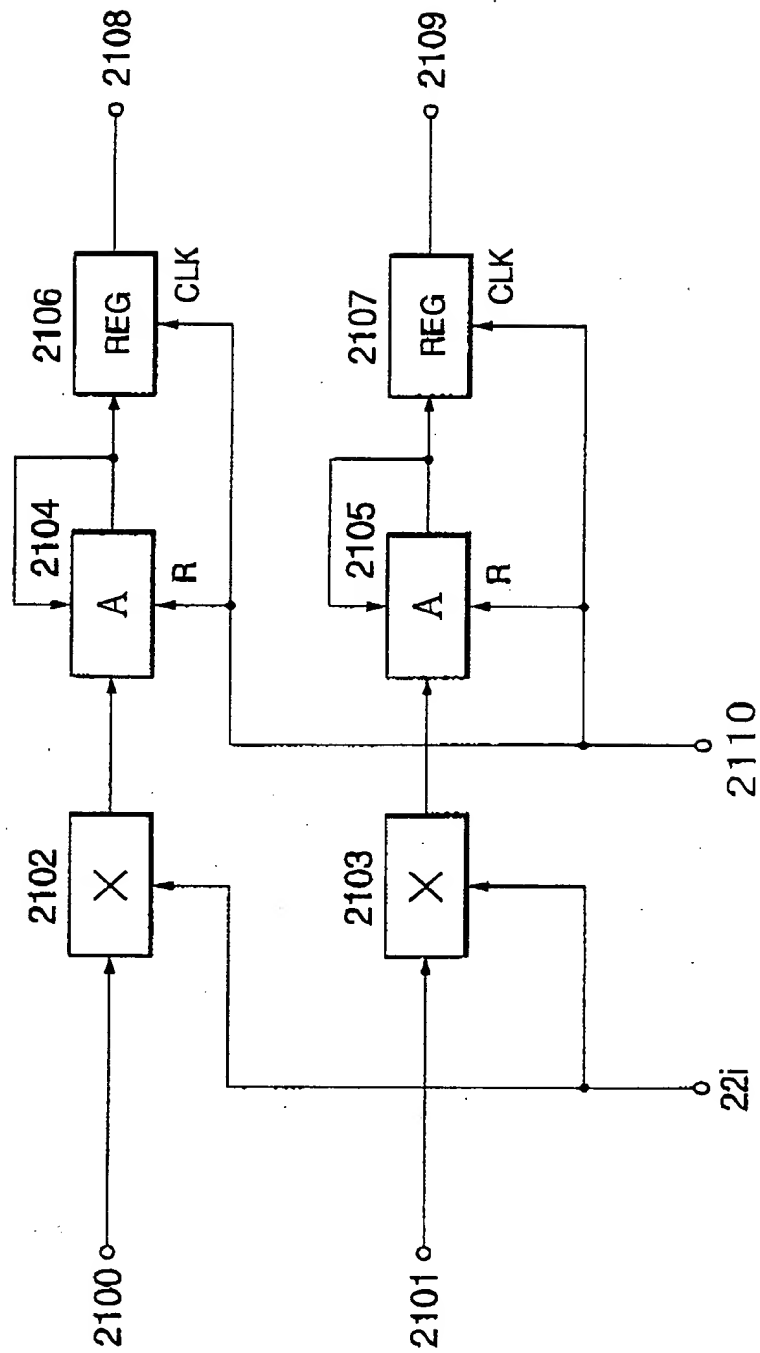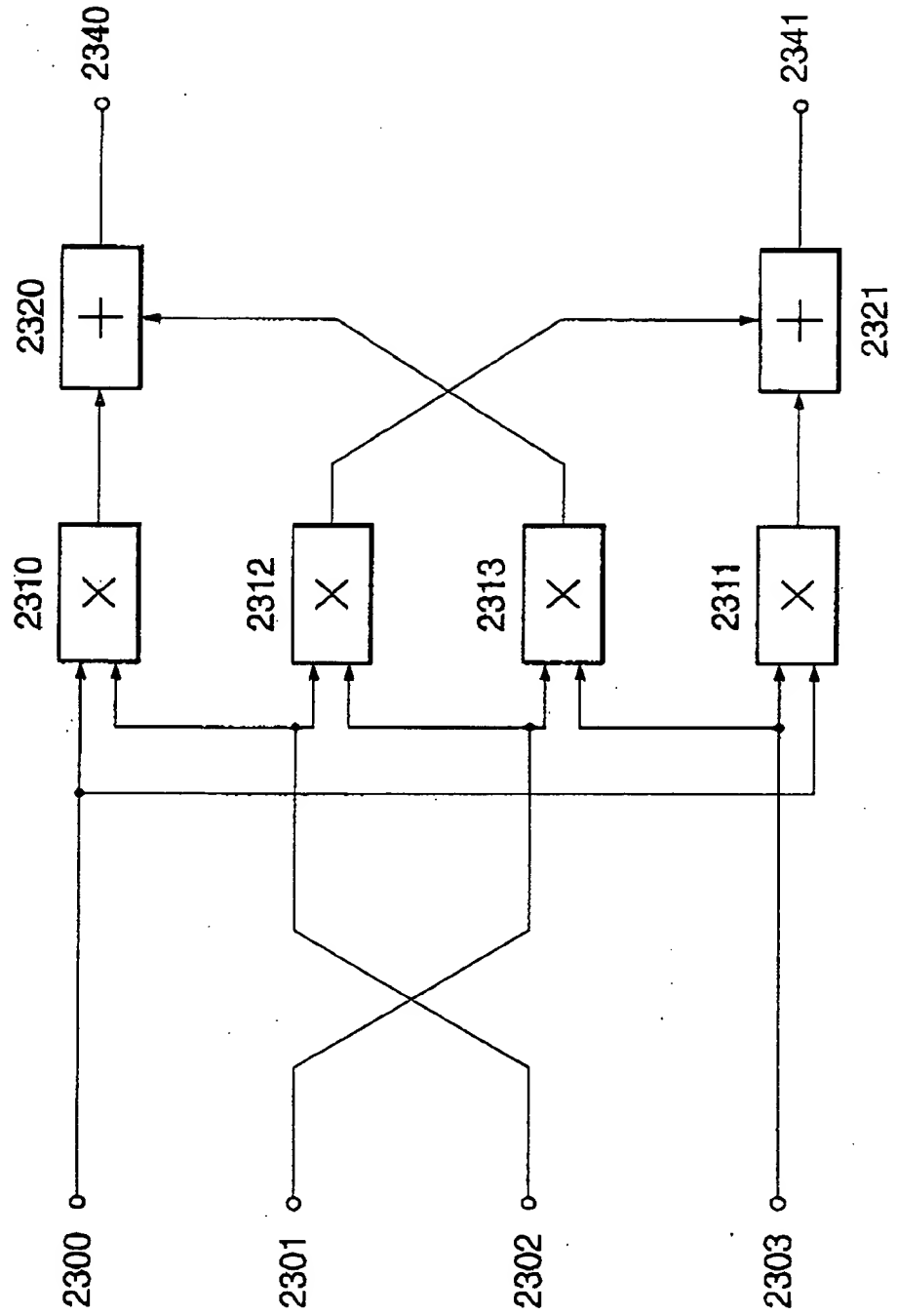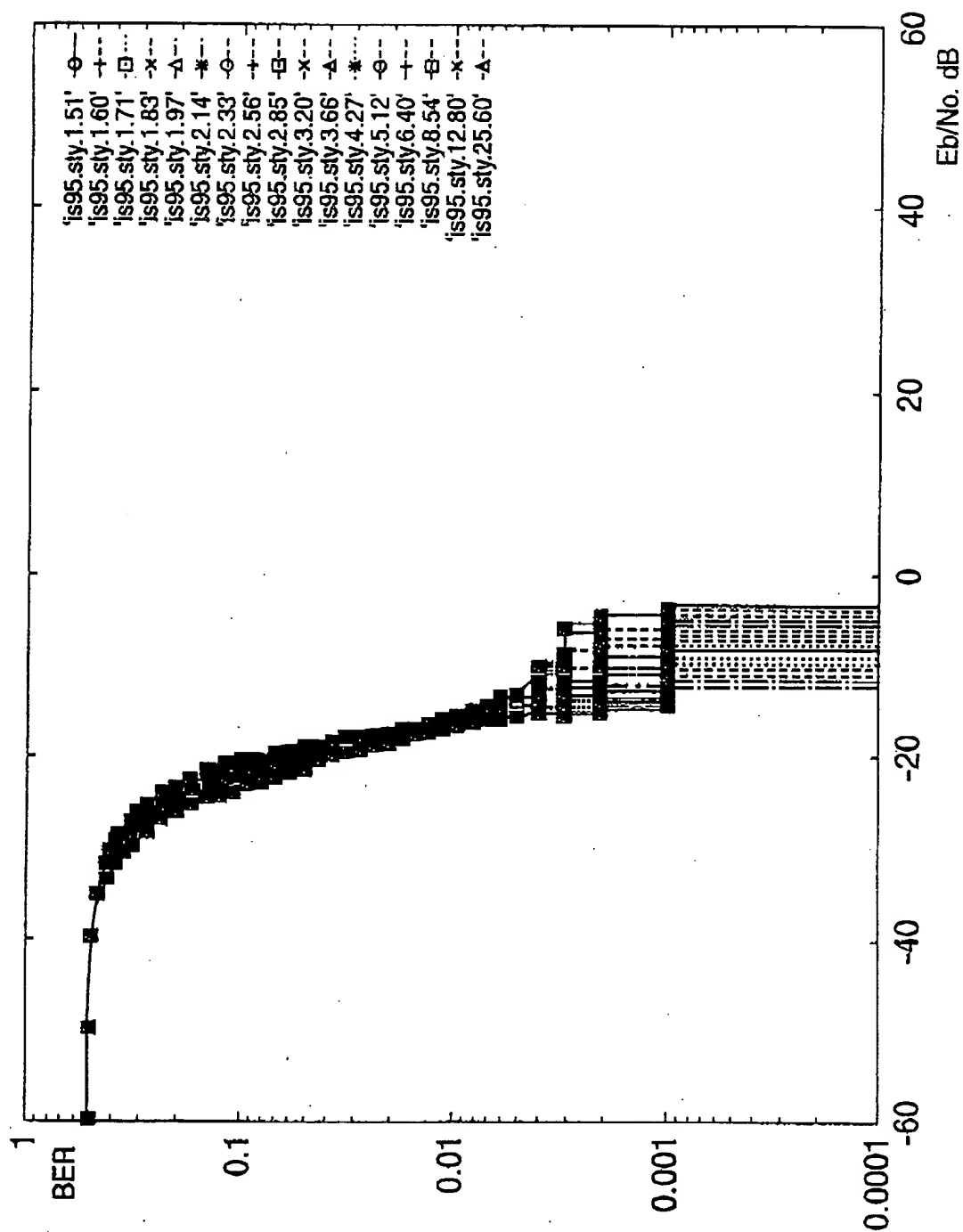EXAMPLE OF A DETAILED CONFIGURATION OF DESPREADING CIRCUIT (deSS)

FIG.35

EXAMPLE OF A DETAILED CONFIGURATION OF PHASE CORRECTION CIRCUIT (CMP)

FIG.36

TRANSMISSION CHARACTERISTICS IN STATIONARY TELEPHONE MODE OF THE CONVENTIONAL SYSTEM

FIG.37

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF
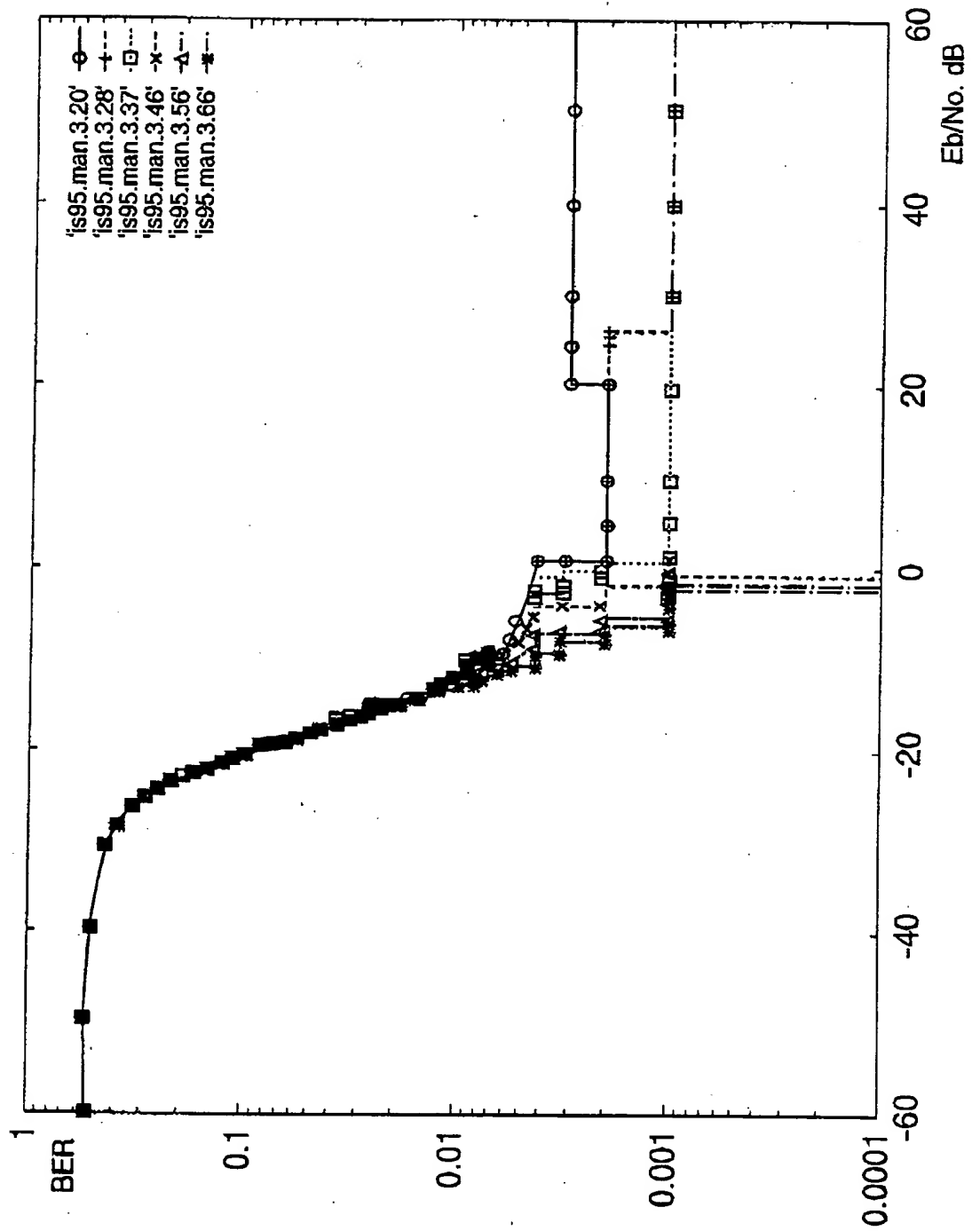THE CONVENTIONAL SYSTEM

FIG.38

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF THE CONVENTIONAL SYSTEM